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Preventing mobile phone use while driving:  
Appreciating the equivocal nature of identity,  
safety and legality in an uncertain world

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Degree for which the thesis has been submitted:

Doctor of Philosophy

March 2019

Word Count: 99,228

Keele University

## **Abstract**

Mobile phone use while driving is a major concern for, but is also performed by, many drivers on UK roads (RAC, 2017b), with 40% of drivers admitting to using a mobile phone illegally (Ibid). This thesis presents a mixed-methods exploration of mobile phone use while driving, with a focus on one particular educational approach to tackling the problem. Whilst the educational course in question appeared to have considerable benefits upon a range of attitudes and behaviours, many aspects of social life were found to compete with that, as well as with other attempts to tackle mobile phone use while driving.

The speed of technological as well as social change necessitates that individuals ‘keep up’ with the pace of life (Rosa, 2013), however, a law that prohibits mobile phone use while driving was found to prevent many forms of acceleration in this way; it inhibits the use of a mobile phone as a communication device, a form of identity-presentation, and even a tool of work. Furthermore, the malleable and changing nature of risk surrounding the behaviour and who can be considered ‘expert’ (Beck, 1992: 29), was found to create difficulties for individuals in understanding those actions that are ‘risky’ and not. Consequently, individuals often failed to recognise the risk of their own actions but did recognise the risk of others’, somewhat influencing perceptions of fairness in interactions with the police. Despite this, an offer of education as an alternative to prosecution was shown to have the ability to enhance perceptions of fairness of police work in various ways.

The thesis concludes that mobile phone use while driving is an action symptomatic of postmodernity; concerned with time, productivity, connectivity, identity and uncertainty. These should be considered in any innovation dedicated to creating safer roads and research project attempting to explore the issue.

## **Acknowledgements**

This research was jointly funded by the Office of the Police and Crime Commissioner for Staffordshire and Keele University and I would firstly like to take this opportunity to thank them for making the research possible.

Special thanks must be made to the project supervisors, Dr Helen Wells and Dr Clare Griffiths, who have devoted much time and energy to supporting me throughout the duration of the PhD, ensuring that this final thesis report was possible. Not only were they able to support the academic process, but they also encouraged me and maintained my motivation during difficult times. They are inspirational in their knowledge, work and as individuals. Helen has a wealth of knowledge in the subject area and it has been an honour to work alongside her.

Similarly, I must thank my family, who have supported me throughout the entire process, helping out wherever possible and being extremely patient as the project took over all aspects of life. Thank you for doing everything possible to support me financially, physically and emotionally. I am forever grateful.

Finally, but most importantly, to Ann Morris, who believed both in the research project and in me as a person. You devoted your own time and effort to guiding me and ensuring that the project continued despite various obstacles that were put in our way. I only wish you were able to read this final thesis report and see how far your dedicated help and caring nature has allowed me to come.

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## **Part one - Background to the thesis**

### **Chapter 1 – Introduction to the thesis**

#### **1.1 Introduction to the problem**

Considerable improvements have been made within the area of road safety over the last several decades, with over a 50% reduction in the number of UK road fatalities since 1976 (DfT, 2016a). The UK is one of the world's leaders in road safety, ranking second out of 180 countries according to the number of road deaths per 100,000 people (WHO, 2015). Despite this, very little change has been observed over the last five years, with a 4% increase in those killed or seriously injured between September 2015 and September 2016 (DfT, 2017c). With the death of 1,793 people and over 170,000 casualties observed on UK roads in 2017, (DfT, 2018), road safety remains a key challenge of research and practice today, although it has not been afforded the academic, political and criminological attention it deserves.

Within the area of road safety, mobile phone use while driving is becoming an increasing concern for not only policy makers and roads policing practitioners (IAM, 2016), but also for road users themselves (RAC, 2017b). In 2017, 478 accidents and 33 deaths were attributed to the driver of a vehicle using a mobile phone while driving (DfT, 2018). It is likely that there are some additional cases whereby mobile phone use while driving played a partial role but was not detected, or was not recorded as a cause by the attending officer at the roadside, and a great many cases where a 'near miss' occurred rather than an accident. Thus, the issue surrounding mobile phone use while driving is clearly evident. As a result of the vast potential consequences of the behaviour, distracted driving has increasingly been subject to government, police and public discussion over the last two decades and has played a role in road safety strategy over the last decade (as indicated, for example, in Butcher, 2016). It has been termed one of the 'Fatal Four' road safety concerns due to the

danger it presents to road users despite efforts afforded by professionals to reduce its prevalence (Smith et al., 2015: 1).

Despite these concerns and efforts to reduce the behaviour, the prevalence of mobile phone use while driving has not reduced significantly since 2008 (DfT, 2015a). As the rates of mobile phone ownership continue to grow, and the functionality of a mobile phone increases, the potential for driver distraction resulting from mobile phone use while driving only further increases (WHO, 2011; Caird et al., 2014). Understanding the behaviour, including how it is adopted, why it is adopted and the cultural environment in which the behaviour takes place is essential in any attempt to acknowledge why it continues to exist and puts the lives of road users at risk on a daily basis. This thesis therefore presents an exploration of the use of mobile phones while driving, focusing upon responses to the behaviour from legislation, enforcement and educational perspectives, as well as assessment of how mobile phone use while driving can be used as a lens through which to explore the social, cultural, legal and policing contexts of contemporary life.

## **1.2 Background to the problem**

It has been an offence to use a handheld mobile phone while driving in the UK since 1<sup>st</sup> December 2003. Although there have been a number of changes to the penalty provided for the offence, it is currently punishable by six penalty points and a £200 fixed penalty fine (DfT, 2016b). The legislation targets handheld mobile phones and handheld devices that perform an “interactive communication function by transmitting and receiving data” (The Road Vehicles (Construction and Use) (Amendment) (No. 4) Regulations, 2003: 1). There is currently no UK legislation specifically prohibiting the use of a hands-free mobile phone while driving, although the behaviour can form the offence of breach of requirements as to control of the vehicle if a noticeable impact upon driver behaviour is observed (The Road Vehicles (Construction and Use) Regulations, 1986).

The act of using a handheld mobile phone while driving can have multiple and significant impacts upon an individual's driving performance. From a wealth of research, findings generally show that drivers who use a mobile phone while driving tend to miss the exit they intended to take (Thulin & Gustafsson, 2004), brake inappropriately (Young & Regan, 2007) and have slower reaction times (Haque & Washington, 2014) than those not using a mobile phone. Physically using a hand to hold or perform functions on a phone reduces an individual's ability to use driving instruments efficiently whilst visually taking one's eye away from the road can cause a driver to miss changes in the roads environment. These physical and visual distractions can result in various impairments to driver behaviour; a driver may miss changes to traffic signals leading them to run red lights (Strayer et al., 2003), have poor lane control as a result of looking away from their intended line of direction (Owens et al., 2011) or fail to notice when other drivers are reducing their speed and slow their own vehicle down accordingly (Consiglio et al., 2003). These driver behaviours all increase the likelihood of a driver being involved in an incident, but explain only part of the distracting nature of using a mobile phone while driving.

A failure to find significant differences in impacts upon driver behaviour between handheld and hands-free mobile phone use while driving has led many researchers to conclude that it is the *cognitive* distraction that is the primary cause for concern, rather than any physical distraction that handheld mobile phone use while driving necessitates (Caird et al., 2008; Strayer et al., 2011). It has been suggested that the cognitive context of using a mobile phone differs from that required for driving a vehicle, resulting in a dual-task interference when both actions are performed simultaneously (Strayer & Johnston, 2001; Strayer et al., 2003). Consequently, full attention cannot be paid to both of these actions at the same time and a short period of time elapses when attempting to switch focus between the activities (Rubinstein et al., 2001; Strayer et al., 2003). As a result, mistakes may be made during the driving experience through cognitive distraction, without the necessity for any physical or visual distraction to be present.

Attitudes towards mobile phone use while driving do suggest a widespread knowledge of its associated risk. The 2015 British Social Attitudes Survey (BSAS) reported that 90% of individuals disagree that it is safe to talk on a handheld mobile phone while driving (DfT, 2017b) and the RAC Report on Motoring (RAC, 2017b) identified handheld mobile phone use while driving as drivers' top concern on the roads. Thus, it would appear that the action should be limited to a small percentage of the road user population as the vast majority of road users perceive mobile phone use while driving as unsafe and of concern when observed on the roads.

Research conducted regarding road safety attitudes *and* behaviour, however, does often highlight a discrepancy between attitudes and behaviour, with individual attitudes towards driving offences being negative but the offence continuing to be performed. The term 'attitudes' refers to a wide-ranging set of evaluative beliefs regarding a given object, thought or concept (Bohner & Dickel, 2011: 392). As a result of this 'wide-ranging' nature of attitudes, a significant number of factors may influence the formation and maintenance of an attitude one holds, adding to their complex nature. There is a body of literature that argues that attitudes do not reliably predict behaviour, and that behaviour cannot always be predicted by attitudes (Delaney et al., 2004; Ajzen & Fishbein, 2005).

White et al. (2004) found that participants identified the use of a handheld mobile phone while driving to make a phone call as the second most risky driver distraction<sup>1</sup> amongst 15 other distracting behaviours. Despite this, almost half of the participants admitted to using their mobile phone while driving either once or twice (24.6%), occasionally (14.4%) or regularly (8.5%). Lee and Humphrey (2011) also found that 34% of drivers admitted to personally using a mobile phone while driving at least once in the last 12 months. Of those that admitted to using a mobile phone while driving, 30% considered themselves to be 'law-abiding'. Whilst there is a contradiction between attitudes and behaviour, one's

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<sup>1</sup> Shaving/applying make-up was reported to be the most risky driver distraction.

perception of the self as ‘law abiding’ is in line with their attitudes regarding the behaviour, rather than the behaviour that they report. A refusal to perceive oneself as a ‘law breaker’ may allow individuals to believe that their attitudes and behaviour are in line with each other, as both are reflective of being a safe road user. However, in reality, they are considerably inconsistent. Furthermore, it may allow individuals to both have negative attitudes regarding offending behaviour on the roads but continue to perform those behaviours themselves<sup>2</sup>.

More recently, 31% of drivers self-reported having used a mobile phone while driving at least once in the last 12 months, with an even larger number admitting to using their phone whilst in stationary traffic, at 48% (RAC, 2016). Even at such a high rate, these statistics refer only to the number of drivers using a handheld mobile phone while driving - additional offences may be committed using other handheld devices, such as tablets and music devices, as technology develops and the possibilities for using technological devices whilst driving surges. Additionally, further use of a mobile phone while driving is likely conducted using a hands-free device, ensuring that the true level of the issue of distracted driving is somewhat concealed. As the behaviour continues despite many efforts to reduce its prevalence, more information must be gathered and underlying factors understood regarding *why* mobile phone use while driving has such intransigent attraction and continues to be adopted despite largely negative attitudes towards the behaviour and legislative attempts to control its use.

### **1.3 The problem in context**

Technological, engineering and scientific developments have significantly changed our experience of everyday life over the last century and even the last decade (Sarwar & Soomro, 2013). From the moment we are awoken by an electronic alarm system to the

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<sup>2</sup> A discussion of the distinction between perceptions of risk for oneself and others will be provided later.



television we watch before going to bed, technological devices and developments feature heavily in our day-to-day lives, so much so that they have become a normalised aspect of postmodernity. In particular, the mobile phone and the automobile are owned and/or used by the majority of the population (Ofcom, 2017), existing as everyday technologies that individuals rely upon in their movements and connections with the world. Technological and engineering advances in the development of vehicles and travel networks have increased capabilities to move freely around the globe. Simultaneously, mobile phones allow instant communication with individuals from anywhere across the globe with a device that can be carried with individuals wherever they go. As such, their benefits cannot be ignored.

Over the last 20 years, mobile phones have particularly become integral features of both working and personal lives. They act not only as communication tools but as diaries, calendars, phonebooks, newspapers, health management tools, medical records, maps, photo albums, music players, document storage, and much more. They enhance an element of security and safety in potential cases of emergency (Thulin & Gustafsson, 2004) and allow for an element of control over social interaction (Madell & Muncer, 2007). Technologies such as mobile phones are also used as a method of informing identities, helping individuals to understand 'who they are' as individuals and how to express their 'self' (Bauman, 2001: 14; Baym, 2015). Individuals even 'fear' what they may be missing out on when they are forced to be without their mobile phones (Przybylski et al., 2013). Mobile phones therefore play a number of roles and as a result become increasingly important, or even necessary, within postmodernity.

Whilst mobile phones seemingly allow individuals to conduct a greater number of tasks in shorter spaces of time and allow time to be used more effectively and efficiently, time spent driving increasingly appears to counter that. A considerable amount of time is being spent

in vehicles, with drivers spending an average of 361 hours travelling each year<sup>3</sup> (DfT, 2015b) and 30 hours sitting in congestion (Fleetnews, 2016). This travel time is often perceived as “unproductive, wasted time in-between ‘real’ activities which should be minimised.” (Lyons & Urry, 2005: 1). Combining the use of a mobile phone and the task of driving therefore may appear to have numerous benefits.

Thus, despite the negative attitudes regarding mobile phone use while driving described above, the action remains attractive in numerous ways. In addition to this, information provided through ‘expert’ sources is not necessarily simple to understand (Beck, 1992: 29). For example, the law allows hands-free mobile phone use to remain legal despite the cognitive distraction that it entails, making it more difficult to acknowledge where risk lies in relation to the behaviour. As mobile phone and vehicular technologies develop further, the *potential* for risk associated with their combined usage increases, although an understanding of the risk itself becomes less clear (Giddens, 2002: 26). Within the roads environment particularly, risk has the potential to change considerably over the course of a journey; for example, at every turn taken, on every different road, when passing any road user, when accelerating, and even when braking. However, risk is a *possibility* that often fails to be *realised* – in this way, it is uncertain and unpredictable. As risk remains difficult to identify but the *tangible benefits* continue to exist, or even increase, mobile phone use while driving likely further increases in attraction and desirability.

Consequently, the policing of such risk becomes increasingly difficult where offending behaviour exists as a possibility alongside a blurring of the risks of accident and/or punishment but tangible benefits of mobile phone use while driving. Furthermore, recent periods of austerity in relation to police forces have resulted in a reduction in police officers (Johnston & Politowski, 2016: 20), with fewer police officers physically able to identify offending behaviour. As the offence is not yet successfully able to be policed by technology

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<sup>3</sup> Within this DfT research, travel includes the use of roads, railways and air travel but does not include commercial travel.

alone<sup>4</sup>, such a reduction is problematic for the policing of mobile phone use while driving as the risk associated with detection of offending reduces whilst those benefits continue to exist. This is combined with the awareness that such risks often fail to *become* harm, and the danger is therefore infrequently negatively reinforced.

The social, cultural, legal and policing contexts in which the act of using a mobile phone while driving exist play an integral role in understanding the behaviour and those methods that have been adopted in an attempt to reduce its existence and improve road safety. Part of this thesis therefore attempts to explore in detail how technologies such as mobile phones have come to be an integral aspect of our everyday lives, resulting in a difficulty reversing the reliance that we have upon them. Alongside this, the way in which the act of using a mobile phone while driving has been defined as a risk and subject, in some way, to legislation prohibiting its use will be explored, as well as those difficulties associated with policing the action in a 'fair' manner. Acknowledgement of the obstacles to reducing mobile phone use while driving is necessary in order to develop current and future attempts to manage the behaviour. Understanding this through a framework that acknowledges the increasing demands of postmodern life and our reliance upon such technologies provides a valid and realistic exploration of the behaviour in its wider context.

#### **1.4 Exploring the problem within this thesis**

This thesis is presented as a criminological exploration into mobile phone use while driving, however, criminological, psychological and sociological concepts and theories are all drawn upon to provide a comprehensive understanding of the topic area. While criminological knowledge provides an understanding of the legislative and enforcement efforts used to reduce mobile phone use while driving, psychological explanations of various types of education and behavioural change theories provide a complementary

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<sup>4</sup> Developments are currently being made in this area.

understanding of other methods used to reduce the prevalence of the behaviour. In addition to this, sociological theories and frameworks of understanding allow for a wider exploration of how the behaviour and responses to its presence exist socially and culturally. The disciplines complement each other well when attempting to understand how attitudes, beliefs, behaviour and experiences create a complex picture of understanding behaviour and attempts to control behaviour. Therefore, a multidisciplinary approach has been adopted throughout this thesis.

This multidisciplinary approach will be anchored in discussion of data collected from one particular form of education targeted at mobile phone use by drivers – Crash Course. Crash Course was an educational intervention offered to both groups of offenders and non-offenders<sup>5</sup>. For those caught committing a mobile phone or seatbelt offence in one particular county of the UK, providing that certain criteria were met, an offer of education as an alternative to prosecution may have been provided through the means of Crash Course. Additional to this, Crash Course was offered to schools within the county, and employee groups across the UK as part of their employee training<sup>6</sup>. It is not currently being used as a form of education<sup>7</sup>, although may be reintroduced following amendments planned in the near future.

The thesis is a timely piece of work, necessary now due to concerning increases in the number of road death and serious injuries in the UK. Mobile phone use while driving is a particularly contemporary issue due to its developing and changing nature over recent years, which is projected to continue developing in the near future as demand for greater speed, connectivity and productivity continues (WHO, 2011). This research is not only able

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<sup>5</sup> Here the term non-offenders refers to those experiencing Crash Course for reasons other than being caught committing an offence; this does not necessarily mean that they have never committed that offence or been caught previously.

<sup>6</sup> Please see chapter 6 for a detailed description of Crash Course.

<sup>7</sup> Primarily as a result of government advice to limit the use of education as an alternative to prosecution for mobile phone offenders, and also a desire to redevelop the course with consideration of theory and research. It did not previously have any theoretical underpinnings.

to improve theoretical and academic understanding in postmodernity through the lens of two combined technologies and their problematic adoption in society, but it also enhances practical understanding of those methods that have been adopted in an attempt to reduce mobile phone use while driving. This thesis therefore provides a wide-ranging exploration of mobile phone use while driving with many implications for academic knowledge, the development and use of legislation, the policing of technology such as mobile phones and attempts to encourage behaviour change through education.

### **1.5 Chapter outline**

Following this introduction to the issue of mobile phone use while driving and the context in which the action has become problematic, chapter 2 will outline the research methodologies that have been adopted in order to explore the area of interest. A mixed methods approach will be described in which longitudinal questionnaires, interviews and observations were combined to collect a range of data surrounding the use of mobile phones whilst driving. These data enquire into how and why individuals perform the behaviour, how the behaviour is policed, how individuals react to identification of their offending behaviour, how they experience an educational method of tackling mobile phone use while driving and the impact that such an educational tool has upon a range of driver attitudes and behaviours. The development of materials used and sampling procedures will be discussed in detail.

Together, this introduction and the methodology chapter provide a background to understanding the thesis and the wider research project in which the thesis is situated, forming part 1 of the thesis. The remainder of the thesis will be broken down into two further parts; part 2 of the thesis will outline a range of responses that have been afforded to the use of a mobile phone while driving, whilst part 3 will explore the social and cultural context in which those responses are provided.

Chapter 3 is the first chapter in part 2 of the thesis and will highlight the legal context of mobile phone use while driving. The development of legislation will be discussed in relation to both handheld and hands-free mobile phone use while driving and the technological developments associated with mobile phones since the introduction of that legislation. A critical evaluation of that legislation will then be provided, within which the terminology used and outdated nature of the legislation will be critiqued for its ability to enhance safety on the roads.

Chapter 4 will introduce methods of policing and penalties in road safety, and the ways in which individuals may be deterred from committing offences on the roads through these law enforcement strategies. It will continue by highlighting how the legislation discussed within chapter 3 is enforced and how penalties have been used in an attempt to tackle mobile phone use while driving. The use of penalty points and penalty fines will be outlined alongside current research evidence detailing the success (or otherwise) of their use.

Within chapter 5, the focus will shift to educational attempts to tackle mobile phone use while driving. Education as a safety intervention generally will be outlined before a more focused discussion surrounding education within road safety is presented. Education has been used in various ways and through various formats within road safety, targeting a range of behaviours on the roads. Some of the various ways in which education has been presented and some differing forms of education that exist will be explored. As part of this, education targeted at offenders and education targeted at road users more generally will be distinguished between in an analysis of their potential benefits to road safety. The chapter will end with a focused discussion of education targeted at mobile phone use while driving.

Forming the final chapter of part two of this thesis, chapter 6 provides a detailed examination of one particular road safety strategy targeted at mobile phone use while driving that acts as a strategy falling within both the realms of education and enforcement. The educational course of focus, Crash Course, will be described, before data-driven

analyses will be discussed in relation to the effects of the course in improving mobile phone use while driving road safety. Changes made to a range of driver attitudes and behaviours will be presented and discussed alongside evaluative discussions of the course itself and the way it is experienced by a range of course attendees. Conclusions regarding part two of the thesis will be made before progression to part 3 of the thesis.

Part 3 of the thesis will begin with chapter 7 providing a detailed presentation of the sociological concept of 'acceleration' (Rosa, 2003; 2013). The notion of speed and development in terms of technological progression and social life plays a particularly important role within this concept and will be discussed as a general aspect of contemporary life. The generally harried nature of life plays a central role here, with time of significant importance to the daily lives of most people. This will be combined with a notion of 'uncertainty' (Giddens, 2002: 22), discussed in terms of technological development that individuals struggle to 'keep up' with in various areas of life. Chapter 8 follows this, tying notions of acceleration and uncertainty to the offence of using a mobile phone while driving through analyses of data collected as part of this thesis.

Chapter 9 will focus upon the conceptual framework of 'risk' (Beck, 1992), outlining how risk can be observed as existing in various ways and can be interpreted using a range of cultural frameworks, rather than simply being an objective statistic that individuals can understand and use to guide behaviour. Within this, the existence of expertise or individuals/organisations that have the apparent ability to advise and guide behaviour will be explored. Chapter 10 adapts this risk framework to the offence of using a mobile phone while driving, and simultaneously, the data collected as part of this thesis expands upon and is used to further explore 'risk' within the roads context.

Chapter 11 introduces the final theoretical area of interest, 'procedural justice' (Tyler, 1988; 2006) and its links to compliance with the law. A number of ways in which methods of policing have been used to elicit compliance will be highlighted before considering their

use more specifically within the roads context. These will be critiqued in relation to their focus upon legality rather than safety. Following this, fairness in the policing of mobile phone use while driving will be considered.

Through data collected as part of this thesis, the policing of mobile phone use while driving will be explored from the perspective of both police officers and offenders in chapter 12. Finally, the chapter will end with a particular focus on Crash Course as an educational tool experienced by individuals as an alternative to prosecution. The procedures associated with policing of behaviour *as well as* the procedures associated with outcomes of policing will be presented as being of considerable importance to a perceived fairness and compliance levels within the roads context.

Lastly, a conclusion to the thesis will be provided, bringing together all areas of consideration in a conclusive and summed exploration of how mobile phone use while driving exists on UK roads, how it has been responded to and the cultural context in which those responses take place. The implications of the research will be discussed both in terms of theory and policy, as well as suggestions for future research made.



## **Chapter 2 – Methodology**

### **2.1 Introduction**

Previous research examining mobile phone use while driving has frequently focused upon quantitative or statistical notions of how and where the behaviour takes place (for example, DfT, 2015a). More exploratory pieces using qualitative methods do not exist in great quantities. Rarely have the two methods been combined to provide a more thorough and widespread understanding of the topic. This thesis, however, has used a mixed methods approach to obtain a wide range of data, allowing for various analyses to be performed and conclusions to be made. This chapter will describe the funders of the research, the aims of the research and research methodologies that have been adopted to obtain the data that following chapters will explore.

The mixed methods approach adopted will be described, outlining how a range of longitudinal questionnaires, interviews and observations were combined to create a wealth of data. The data were collected from a range of participants; caught offenders, non-caught offenders, non-offenders<sup>8</sup>, policing professionals and educational course presenters, further maximising the exploratory nature and extensive understanding able to be obtained from such data. Each of these participant groups will be described in detail. The recruitment strategies, sampling procedures, development of materials and execution of research methods will be discussed, alongside difficulties encountered throughout the data collection process and finally, how the data were analysed once collected.

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<sup>8</sup> Non-caught offenders and non-offenders are presented within the employee group, experiencing Crash Course through work rather than a result of being caught committing a traffic offence. Their status is based on self-report data.

## 2.2 Project funders

The research project that provided the data for this thesis was funded jointly by the Office of the Police and Crime Commissioner for Staffordshire and Keele University, with the understanding that an evaluation of one particular educational programme being used by a police force would be conducted as part of the project<sup>9</sup>. Access to participants was made possible by this police force and the team of professional education providers (Crash Course presenters). As such, the project aims and data collection processes were influenced by this evaluative process. Evaluation of the educational programme, Crash Course, allowed for access to a range of participants from various backgrounds, both as a result of their association with the course and through connections made via the Crash Course team. It is important to note here, however, that the funding of this project had no direct influence upon the results obtained or analysis of those results.

## 2.3 Research aims

Prior to the development of any research materials, a review of ‘road safety education’, ‘distracted driving’, ‘handheld and hands-free’ and ‘mobile phone use while driving’ key terms were undertaken from a range of road safety relevant sources. From this review, it was concluded that statistics regarding the prevalence of mobile phone use while driving provided only a partial understanding and failed to allow for a detailed understanding of *why* individuals use mobile phones or other technologies whilst driving despite an apparent recognition of the risk associated with the action in other drivers.

As such, the research questions developed as part of this research project began at a basic level of acknowledging frequency and type of distraction as well as attitudes concerning mobile phone use while driving distraction, and then progressed to a more detailed

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<sup>9</sup> The police force has received the report.

exploration of why individuals use mobile phones while driving, despite various attempts to reduce its existence. These were combined with aims relating to Crash Course as a form of driver education specifically, deriving from the evaluative requirement of the research project.

The overarching aim of the research was to explore the existence of and reasons for participating in mobile phone use while driving. In order to gain this information a number of smaller and more manageable aims were developed:

- To understand the prevalence of various risky driver behaviours including different forms of mobile phone use while driving;
- To examine attitudes towards various risky driver behaviours including different forms of mobile phone use while driving;
- To examine driver attitudes towards the police (generally and in relation to roads policing);
- To understand how one particular educational road safety intervention (Crash Course) is used and experienced in response to mobile phone use while driving;
- To explore police officer experiences of identifying traffic offenders and offering education as an alternative to prosecution;
- To examine the impact of Crash Course on driver attitudes and behaviour over a six-month time period;

These research aims were developed with the intention of complementing the information that is already available but also enhancing that literature through the provision of a more in-depth exploration of the issue from a range of perspectives. Gathering data from various groups of people involved in different areas of offending, enforcement and education provision further widens the scope of knowledge potentially able to be obtained from the

research. Following the development of these research aims, the research methodology was chosen and methods through which to gather data were developed.

#### **2.4 Mixed methods approach to understanding mobile phone use while driving**

The choice of either a quantitative or qualitative approach is generally dependent upon the research questions that a researcher aims to answer or explore (Bryman, 2016: 621). In a research project that aims to understand a wide range of factors to which little is currently understood, however, a range of research aims are developed, allowing for a range of potential methodological responses. Consequently, a combination of research methods, or a mixed methods approach becomes useful. As Bryman (2006) suggests, a combination of approaches allows for conclusions to be enhanced where one set of data is able to confirm and support the other, and vice versa (p.105). However, where the data fail to provide that mutual support or becomes overwhelming for a researcher to successfully interpret, difficulties may arise.

For this research topic, nonetheless, the benefits of adopting a mixed methods approach were deemed greater than the potential limitations. As Johnson and Onwuegbuzie (2004) suggest, “the goal of mixed methods research is not to replace either of these approaches but rather to draw from the strengths and minimize the weaknesses of both in single research studies and across studies” (pp. 14-15). Although it is recognised that limitations exist in working with such a complexity of data in terms of managing and analyzing such a wealth of data (Morse, 2010), mixed-methods approaches are particularly useful for developing topic areas such as the one of interest within this thesis. As a result, a mixed methods approach was adopted within this research through the use of questionnaires, interviews and observations together, to explore in detail how and why individuals continue to use mobile phones whilst driving despite educational and enforcement strategies to reduce the action. The questionnaires and interviews were developed as equal elements of the research project rather than one of those methods playing a primary role and simply

being supported by the other. Observations were conducted as a supportive element rather than a research method of equal importance, to provide an overarching understanding of the course and individual responses to it.

This methodological triangulation was combined with data triangulation to ensure that these perceptions, experiences and behavioural understandings were sought from a range of individuals involved in experiencing traffic law enforcement (Maruna, 2010: 135). Although there are limitations in research triangulation, as with methodological triangulation, it was considered necessary here to widen an understanding of the topic area. Questionnaires were completed by two different groups of participants, one of which were attending a driver education course as an alternative to prosecution following identification of seatbelt or mobile phone offending behaviour, whilst the other group of participants were attending that same course as part of their employment or at the request of their employer<sup>10</sup>. Throughout this thesis the former will be referred to as the offender group and the latter as the employee group. Those attending through employment may or may not have committed the offences previously and may or may not have previously received education as an alternative to prosecution for the offence but were not receiving this educational course within the same context as those considered ‘offenders’. In addition to this, data were gathered from police officers and those professionals presenting the educational course attended by ‘offenders’ and ‘employees’.

Table 2.1 provides a general overview of the research methods used, the data collected in the research period between November 2014 and May 2016, and their purpose within the research project. The ethical review panel at Keele University granted ethical approval for each research method. Copies of the approval letter can be found in appendix A. Each of these research methods utilised will now be discussed in more detail.

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<sup>10</sup> The extent to which the samples received were representative of their parent populations could not be gauged as the researcher could not access the personal details of course attendees or examine the register of attendance to assess the number of actual course attendees.

**Table 2.1:** Data collection methods

Method	n	Purpose
Pre-course questionnaire	975 offender 285 employee	To identify attitudes and behaviour in relation to various risky road user actions prior to attendance at a driver education course.
Post-course questionnaire	201 offender 120 employee	To identify any changes in attitudes and behaviour within three weeks following attendance at a driver education course.
Follow-up questionnaire	40 offender 19 employee	To identify any changes in attitudes and behaviour six months after attendance at a driver education course.
Interviews with course attendees	9 offender 19 employee	To gain additional detail regarding experience of the course, perceptions of the course, driver attitudes and driver behaviour.
Interviews with police officers	13	To understand how offenders are identified and offered education as an alternative to prosecution and how police officers perceive the use of responses to traffic offending such as penalty fines and education.
Interviews with education course presenters	6	To gain additional detail regarding the development of Crash Course, how presenters experience course presentation and how they perceive the use of responses to traffic offending such as penalty fines and education.
Observations of driver education course	12 offender courses 4 employee courses	To understand how one particular education course is presented, how course attendees experience the course and the overall processes associated with course attendance and presentation.  To ensure the context in which other data were gathered was fully understood.

## **2.5 Longitudinal questionnaires**

### **2.5.1 Questionnaire development**

The principle aim of the questionnaire element of the research was to better understand attitudes towards mobile phone use whilst driving amongst a range of other risky driver behaviours, as well as involvement with those behaviours themselves. Questionnaires were deemed a useful method through which this information could be obtained on a large scale, to provide a more generalisable understanding of the action at this essential base level, within this population (Bryman, 2016: 193).

Three questionnaires were developed in order to identify any changes in responses from prior to an experience of education (pre-course), to immediately after an experience of education (post-course), and again six months following that educational experience (follow-up). This would allow for an understanding of any changes in evidence following experience of education as a road safety strategy, as well as how those changes were maintained in the longer-term. The research aim of examining the impact of one particular educational road safety intervention on driver attitudes and behaviour over a six-month time period was of primary focus here. A six-month time period was chosen for the follow-up data collection process as it reflected previous evaluative research concerning road safety strategies that considered changes over periods of three months to one year (Conner & Lai, 2005; Ashworth et al., 2007; Fylan et al., 2009; ACPO, 2011).

There were also separate questionnaires developed for the two different groups of interest, employees and offenders. Both of these sets of questionnaires were the same apart from a single additional section for employees enquiring into their most recent experience of being 'caught' committing an offence and how that occurred, with the following section

regarding personal experience with roads policing officers able to be bypassed by those who had never had such an experience.

Briefly, the questionnaires consisted of several sections relating to; general crash risk attitudes, personal safety attitudes, attitudes towards the police, driver behaviour, attitudes regarding seatbelt and mobile phone use, future driving intentions, evaluation of Crash Course, and demographic details. The questionnaire items used within a number of road safety intervention evaluations were collated and examined for relevance to the aims of this research project<sup>11</sup>.

The questions relating to attitudes towards driver risk were developed from research by Ashworth et al. (2007), with those relating to hands-free mobile phone use, texting and seatbelt use added following the development of research aims for this project. The same questions were adapted to enquire into perceptions of one's own safety whilst driving, allowing for a comparison between general risk attitudes and personal risk attitudes. Again, the same behaviours were questioned in terms of driver behaviour and behavioural intention. Attitudes towards seatbelt and mobile phone use questions were developed from an ACPO (2011) evaluation of the National Speed Awareness Course but manipulated to reflect the actions relevant to Crash Course as a form of education; seatbelt use and mobile phone use.

Questions regarding attitudes towards the police were adapted from the work of Hinds (2009) and Murphy et al. (2008), but were separated into three different sections of; perceptions of roads policing, perceptions of policing of the law in general, and perceptions of an individual's personal experience with the police. These sections were all included to provide a wider and more complete understanding of attitudes towards the police and to achieve the research aim of examining attitudes towards the police.

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<sup>11</sup> Please see appendices B and C for a question bank and annotated questionnaire.



Evaluation questions were taken from Hoggarth et al.'s (2009) previous evaluation of Crash Course and Senserrick & Swinburne's (2001) evaluation of young driver training, allowing for an examination of driver perceptions of one particular educational road safety strategy. Finally, questions regarding demographic details were taken from a range of the above sources used to inform the development of the questionnaires and were included in order to allow for more detailed analyses in terms of the demographics of course attendees. Please see appendices D-I for copies of both offender and employee pre-course, post-course and follow-up questionnaires.

A pilot phase of data collection was adopted for one group of offenders and one group of employees to ensure that the questionnaire materials were suitable for the participants and that the suggested time of completion was correct. This took place with the pre-course questionnaires only as the post-course and follow-up questionnaires were only marginally different to the pre-course questionnaire. Following this pilot phase, the suggested timescale of completion was reduced from 15-20 minutes to 10-15 minutes and one wording error within the demographics section of the questionnaire was rectified. Other than these two minor changes, all questions remained the same for the full data collection period.

### **2.5.2 Questionnaire procedure**

All individuals attending Crash Course during the data collection period were invited to take part in the research by the Crash Course team via email<sup>12</sup>, as figure 2.1 depicts. It was anticipated that participation through the online questionnaire would be low, as previous research has suggested (Fan & Yan, 2009). A hard copy of the questionnaire was therefore provided at all venues attended by the researcher. Upon arrival at a Crash Course venue,

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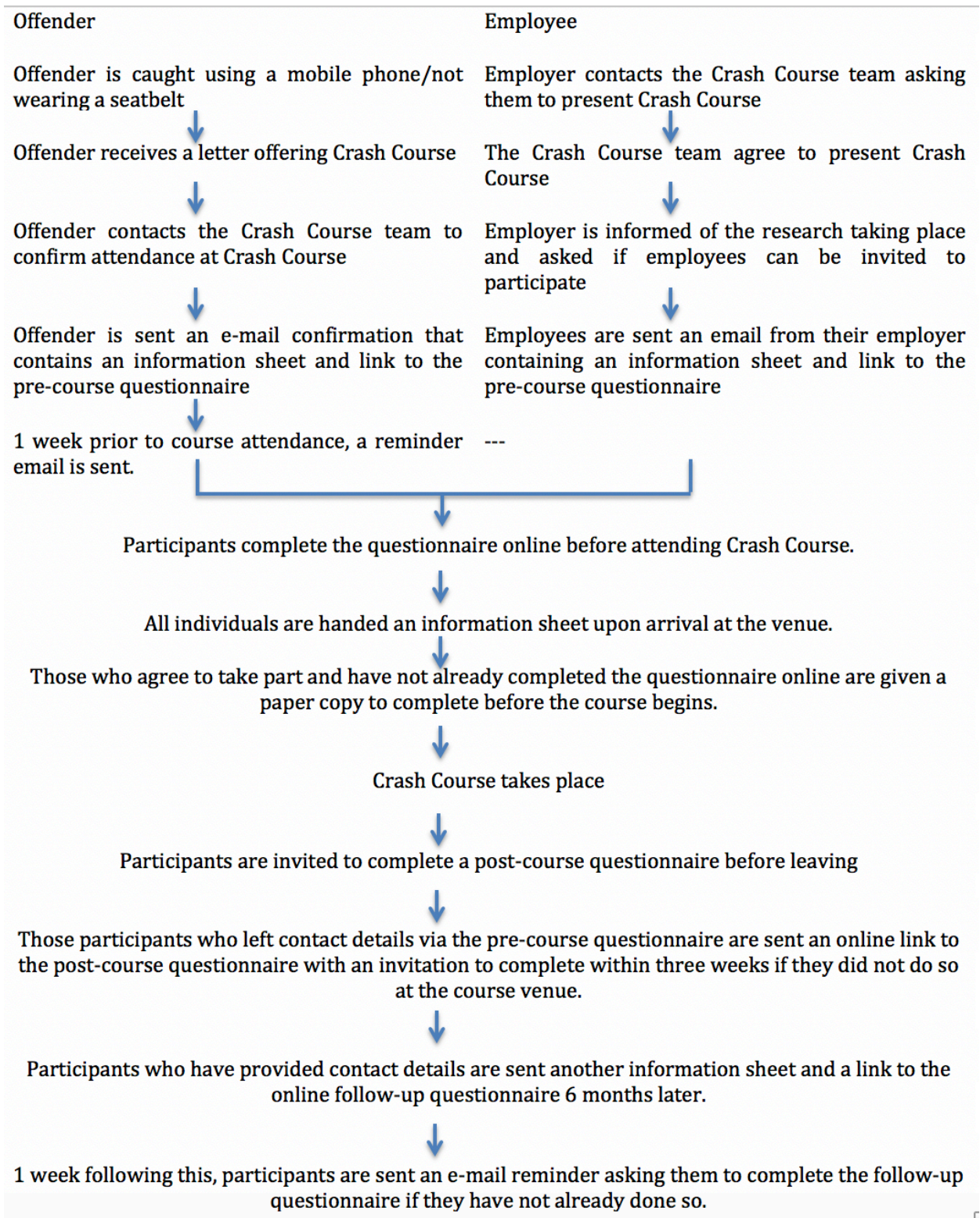
<sup>12</sup> See appendix J for approximate email wording.

for both employees and offenders, either the employer or Crash Course team introduced individuals to the researcher as course attendees signed in to prove their attendance at the course. They were asked to complete the hard copy of the questionnaire if they wished to participate in the research and had not already completed the questionnaire online. All of those attending the course at least 10 minutes prior to course commencement were invited to take part in the research. Completed questionnaires were collected by the researcher prior to the course commencing to avoid any interference with course delivery. Although anonymity could not be ensured as contact details were collected, participant information was kept confidential.

At the end of the Crash Course presentation, the Crash Course team member closing the course again informed the audience of the research taking place and invited all individuals to complete a second, post-course questionnaire before they left the venue. Post-course questionnaires were handed out to course attendees before they left the presentation room if they wished to complete this post-course questionnaire. The course attendees were also informed that they could complete the post-course questionnaire using an online link within three weeks of attending the course if they wanted to partake and preferred that method. A separate piece of paper was provided for those who were happy to be sent an email with the link to the post-course questionnaire.

All course attendees who had provided contact details were sent an email within one week following course attendance and were invited to complete the post-course questionnaire online if they had not already done so at the course venue. All course attendees who had left contact details at any stage of the research were sent an email invitation to complete the third and final questionnaire, the follow-up questionnaire, six months after their initial attendance at Crash Course. A link was again provided to allow the questionnaire to be completed online. A reminder email was sent two weeks later to remind participants to complete the questionnaire if they wished to take part but had not already done so. These methods were adopted to increase likelihood of participation.

**Figure 2.1:** Offender and employee process of questionnaire completion



Over an 18-month data collection period, a total of 1,640 questionnaires were completed by 1,387 participants. For the offender group, 975 pre-course questionnaires were completed, 201 post-course questionnaires and 40 follow-up questionnaires. For the employee group, 285 pre-course questionnaires were completed, 120 post-course questionnaires, and 19 follow-up questionnaires<sup>13</sup>.

## **2.6 Interviews**

Interviews were conducted with all groups of participants involved in the research; employee course attendees, offender course attendees, police officers, and Crash Course presenters. Recognising that attitudes towards, and experiences of traffic law/enforcement do not exist within a cultural vacuum, interviews were conducted to allow for an understanding of the topics of interest as described within the social and cultural settings which they are encountered or experienced. This allows for an expansion of the information gathered from questionnaires, both in terms of understanding that cultural setting, and the attitudes or actions of individuals in more detail.

### **2.6.1 Course attendee interviews**

The course attendee interview guides were developed primarily from the literature review that had taken place to inform the development of questionnaires. Those topics of interest within the thesis that needed further exploration than questionnaire data would allow were considered within interviews through questions developed by the researcher. The interview guide included sections concerning; driver behaviour, experiences with the police, processes prior to attending Crash Course, experiences of Crash Course, attitudes and behaviour following Crash Course, and evaluation of Crash Course<sup>14</sup>. This range of questions allowed for an understanding of the processes surrounding individual attendance

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<sup>13</sup> A discussion of participant attrition is provided later in this chapter.

<sup>14</sup> Please see appendix L for a copy of the course attendee interview guides.

at a road safety education course, as well as a range of attitudes and behaviours regarding use of the roads and the police more widely, complementing the questionnaire data well.

Experiences with the police and attitudes towards the police/emergency services were questioned to explore ideas surrounding procedural justice (Tyler, 1988) and encounters with roads policing professionals (Bradford et al., 2015), which previous research had identified as important in relation to future offending (Sunshine & Tyler, 2003). This also linked in to the research aim of examining driver attitudes towards the police, with a greater focus upon personal experience. Following this, questions were asked regarding attitudes and behaviour, particularly focusing upon any changes observed following attendance at Crash Course. These questions assisted in achieving a number of research aims targeted at understanding risky driver attitudes and behaviour, as well as how changes may have been observed following attendance at an educational road safety course. These questions were primarily developed based upon the aims of the research and that information missing from the literature, rather than from the literature itself.

Interview participants were recruited through the contact details of those that had completed the questionnaire aspect of the research. All individuals who had left an email address on their questionnaire were sent an email inviting them to take part in an interview with an information sheet attached<sup>15</sup>. This email was sent four to six weeks after their attendance at Crash Course, for the interview to take place between eight and ten weeks following attendance at the course with those who were happy to take part in this aspect of the research. Individuals were asked to reply to that email if they would be happy to take part, indicating their willingness to participate and any dates or times that best suited them.

Once contact had been made with the researcher, an interview was arranged for a date and time suitable to the participant. Although a face-to-face interview was offered in all

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<sup>15</sup> Please see appendix K for the invitation email.

occasions, all participants chose a telephone interview. Telephone interviews allowed for the maximisation of participation despite the wide-ranging geographical nature of the participants. Telephone interviews have previously been shown to be equally as effective and yield similar results to face-to-face interviews (Sturges & Hanrahan, 2004; Novick, 2008). When a date and time had been agreed, participants were sent a consent form to read and sign electronically before returning to the researcher prior to the interview taking place. This process was the same for both offender and employee participants. Each interview lasted between 25 and 60 minutes. Upon completion of the interview, participants were thanked for their participation, sent a debrief form via email that they were asked to read and encouraged to contact the researcher should they have had any questions or additional comments. All interviews were transcribed with a pseudonym and were not connected to any other data, ensuring confidentiality was maintained.

### **2.6.2 Police officer interviews**

After the detailed literature review it was acknowledged that little was known about encounters between roads policing professionals and the driver population, particularly in terms of how that encounter takes place and individuals are informed of the outcome of that encounter. The interviews therefore primarily attempted to examine how the ability to offer education as an alternative to prosecution impacts upon a police officer's daily experiences of identifying and stopping traffic offenders, as well as the reactions and attitudes of offenders themselves from the perspective of an officer.

Questions regarding experiences of enforcement were added to explore notions of fairness and justice and how drivers experience an encounter with the police, to complement those views obtained from drivers themselves developed from literatures surrounding procedural justice (Tyler, 1988; Bradford et al., 2015). The remaining questions were developed to fulfill the research aims of exploring perceptions of the use of education as an alternative to prosecution. Rather than simply focus upon education, police officers were also asked

about their perceptions of penalty points, penalty fines and how technological devices could potentially be used in the future to detect and/or prevent traffic offending such as mobile phone use while driving, allowing their perceptions of education to be situated amongst those of other road safety strategies.

Policing professionals were also asked about their understanding and experience of identifying offenders for the offences of using a mobile phone while driving and failure to wear a seatbelt – the two offences for which individuals may be offered Crash Course as an educational alternative to prosecution. These questions allowed for a deeper understanding of the offender actions that have been identified by police officers, focusing upon mobile phone use while driving, what it means to use a mobile phone while driving and the various ways in which individuals have been caught ‘using’ a mobile phone while driving<sup>16</sup>.

The Crash Course team informally introduced the research project to various groups within the local police force when possible, all of whom were verbally invited to take part in an interview providing that they had some experience of identifying traffic offenders. Following this, the Crash Course team arranged for one day to be spent with a motorway policing department and two days to be spent at the local police headquarters where police officers had been informed of the research project by the Crash Course team. Upon arrival at both of these venues, the Superintendent overseeing the team of police officers verbally invited individual officers to take time from their work tasks to participate in an interview. They invited all individuals present on that day to attend an interview. The researcher only came into contact with those that agreed to find out more and was unaware of any individuals who refused.

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<sup>16</sup> Please see appendix M for a copy of the police officer interview guide.

Interviews took place in a private room where the police officers were given an information sheet and asked to read and sign a consent form if they were happy to take part in an interview after reading the information sheet. The interviews lasted between 20 and 45 minutes. At the end of the interview all participants were given a copy of the debrief form to read once they had left and asked if there were any further questions or comments that they wished to make before leaving the room. Once they had left the room, another police officer volunteered themselves to take part in the research and entered the interview room, until all officers willing to take part had been interviewed. This procedure was the same for both interview venues. When interviews were transcribed, pseudonyms were given to ensure anonymity and confidentiality of the information given.

### **2.6.3 Crash Course presenter interviews**

The Crash Course presenter interview guide was developed on a similar basis to that of the policing professionals, developed primarily from the aims of the research project rather than the current literature. The primary aims of the interviews with course presenters were to understand how one particular educational road safety intervention is used in response to mobile phone use while driving and to explore experiences of presenting Crash Course. The interview guide consisted of a number of sections relating to; background of Crash Course, Crash Course as an alternative to prosecution, experiencing Crash Course, driver attitude and behaviour, and the future of Crash Course.

As this particular educational course has a largely emotional content, the emotional nature of their work was questioned in accordance with concepts of emotion work (Hochschild, 1983). It was necessary to assess the influence of such personal and emotional stories on employees as well as course attendees, and that such personal information was obtained



through the use of interviews rather than any other research method due to its personal nature<sup>17</sup>.

Once the interview materials had been developed, all Crash Course presenters were given an information sheet to read and were invited to take part in an interview. Four course presenters were initially invited to participate in an interview, with two additional team members joining the team partway through the data collection process. After several months of working as part of the Crash Course team, the remaining two course presenters were invited to take part in an interview. All team members agreed to take part in a face-to-face interview. Two of those interviews took place at Staffordshire Police Headquarters in a private office, two in a private room at a Crash Course venue and the final two in an office at Keele University.

Upon arrival at the interview venue, participants were given a consent form to read and sign, confirming their agreement to take part in an interview. All interviews lasted between 30 and 60 minutes. Upon completion of the interview, participants were thanked, given a debrief sheet and informed that they could ask questions or raise any concerns regarding the interviews at any point of the data collection process. When transcribed, pseudonyms were given to ensure confidentiality to the highest extent possible (given the small number of presenters).

## **2.7 Observations**

Observations of Crash Course as a road safety strategy offered to both offenders and employees, and individual responses to the course, took place between November 2014 and June 2015. Observations were conducted alongside questionnaires and interviews to allow for a visual representation and consolidation of information from the detached (in

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<sup>17</sup> Please see appendix N for a copy of the course presenter interview guide.

that there is no link between the researcher and reasons for course attendance) perspective of the researcher. Although the observations would not capture all information, or allow for an understanding of emotional/internal responses to the course, they did allow for an understanding of the ‘reality’ of the topic of interest (Bryman, 2006: 48).

The observations were conducted in order to allow for a firmer understanding of the course itself as well as meeting the research aim of understanding how individuals experience Crash Course. They were based upon a coding log that allowed the researcher to make notes of: ‘the environment’, ‘group composition’, ‘group formation’, ‘conversation’, ‘reactions’, and ‘other’. This coding log was developed based upon previous attendance at the course whereby the course was observed but the course attendees were not purposefully observed<sup>18</sup>.

During the observation aspect of the research process, the researcher arrived at the Crash Course venue prior to the arrival of any course attendees. Upon arrival at the Crash Course venue, individuals were requested to sign in to prove attendance at that course. After signing in they were informed by the researcher of the observation research taking place and asked to sign a consent form to ensure that they were happy for the observation to take place. Consent was required of all course attendees in order for the observation to take place. On three separate occasions for those in the offender group, one course attendee refused to take part in the observation aspect of the research and all observation ceased at that point for those courses. No individuals in the employee groups refused the observation.

Observation began as the course attendees started entering the course venue, although this was minimal due to the nature of gaining consent from all course attendees. Observation continued through the duration of the course presentation and ceased when all course attendees had left the venue. The coding log was followed to remind the researcher of the

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<sup>18</sup> Please see appendix O for a copy of the coding log.

primary focuses of the observation but was used only as a loose guideline rather than a strict parameter. Any additional information that was of interest was also noted to ensure that a full recollection of the observed data was gained, rather than relying solely on the use of a coding log that can be restricting (Sanger, 1996; Simpson & Tuson, 2003).

## **2.8 Data analysis**

With the mixed methods approach adopted, a range of analyses were performed on the data collected. The questionnaire and interview data were analysed separately before being brought together in a unified analysis. The observation data were used to support both of those analyses where necessary but was not subject to any single analytical method.

The interview data were first analysed, separately depending upon their participant grouping, using Braun and Clarke's (2006) process of thematic analysis. This began with a 'familiarisation process' whereby the data were read and reread to gain an initial understanding of the data collected. The data were then coded by making notes regarding the information presented, highlighting any areas of repetition between the interviews. These codes were reviewed and themes developed, with many of the codes made falling into a smaller number of categories, or themes. Once each of the groups of interviews had been analysed in this way, they were then brought together, with each set of themes for each group (offenders, employees, police officers, course presenters), being incorporated into a wider set of themes that broadly provided an understanding of all interview data collected. There were some smaller themes that acted as subthemes, whilst others were rendered insignificant within the wider data context. The removal of a number of these subthemes does create limitations in providing an understanding of the dataset as a whole, as was understood as a potential limitation prior to data collection. However, it does also allow for a wider understanding of the topic area to be discussed within this thesis.

The questionnaire data were initially split into participant groups; employee pre-course, employee post-course, employee follow-up, offender pre-course, offender post-course and offender follow-up. These different groups were analysed individually to provide basic descriptive statistics of each time stage of the research for both groups of participants and to provide comparative analyses between those groups and time phases. Descriptive statistics such as percentages were obtained for each item within the questionnaire for each of these groups and time phases. Statistics for offender groups consisted of all participants, including those who attended Crash Course for seatbelt *and* mobile phone offences. Scales for certain collective items were created and descriptive statistics obtained for those scales also. These basic descriptive statistics were then used to inform further statistical analyses, once linked to the interview data. Non-parametric analyses were conducted initially and compared to the same parametric alternatives whereby similar results were obtained. Where similar results were obtained or a normal distribution of data was found, parametric tests were reported. The results presented throughout this thesis therefore frequently relate to parametric statistical analyses rather than their non-parametric alternatives.

All analyses were conducted of those attending Crash Course for mobile phone *and* seatbelt offences, to observe whether any changes in attitudes or behaviour were observed in both groups. It was also assumed that whilst attending Crash Course for only one of those offences, that does not mean that those individuals do not commit both offences (just as those attending as employees cannot be considered to never offend). A consistency in the participant group considered within analyses (i.e., including both types of offender) was believed to overcome the benefit (and additional complexity for a reader) of analysing these groups separately.

The questionnaire data were also split into four different thematic categories prior to data collection; driver attitudes, driver behaviour, perceptions of the police, perceptions of Crash Course. Following initial analyses, these thematic areas were each linked to similar or relevant interview themes. The questionnaire data were then further analysed depending

upon the theme(s) that it most closely related. These analyses included multiple linear regression and principle components analyses. This involved more complex statistical analyses that were chosen as a result of the data collected, the research aims and the data from interviews that highlighted particular areas of interest and therefore additional analysis. As a result of the research aims and areas of interest deriving from the data, gender and age analyses were limited<sup>19</sup>. Some themes contained more qualitative data whereas others contained more quantitative data, as can be observed in the remaining chapters of this thesis.

## **2.9 Issues in data collection**

Throughout the data collection process there have been a variety of complications that have subsequently impacted upon that process and results obtained from the final data collected. It is necessary to acknowledge these limitations here to allow for an appreciation of the data that have been used to inform the data analysis chapters to follow and conclusions that have been made.

### **2.9.1 Participant access**

Before any data were collected, a number of meetings took place with the Crash Course team leader to discuss the research that would be taking place and access to participants through Crash Course. These meetings were successful and suggested that up to 120 potential participants could be invited to take part in the research project every two weeks. This pool of participants would have allowed for a significant number of questionnaire

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<sup>19</sup> More of those analyses can be found in the report for Staffordshire Police produced as part of the Crash Course evaluation (Savigar, 2016). The theoretical frameworks explored here pay little attention to age and gender, and therefore the resulting analyses follow that. It is acknowledged that additional work exploring these variables would be useful, as notions of acceleration and risk would likely have different meanings for those of different age ranges and genders, just as the frequency and type of 'use' of a mobile phone while driving potentially differs for those of different ages (Brake, 2015).

participants to be available within a short six-month period of pre and post-course data collection. Unfortunately, however, those numbers were not maintained throughout the data collection process. As the number of individuals attending the course is not predetermined or influenced by those running the course, issues with the number of course attendees were experienced that were out of the hands of the gatekeepers and the researcher.

Potentially due somewhat to reductions in police funding and therefore reduced numbers of policing professionals enforcing traffic law as well as motorway road works, the number of individuals being offered Crash Course as an educational alternative to prosecution dropped somewhat at the start of the data collection process. Consequently, the number of available participants was reduced. This influenced the length of time that was spent collecting questionnaire data. The proposed data collection period of six months was doubled to twelve to ensure a significant number of questionnaires were available for data analysis and was followed by an additional six-month time period for which the remaining follow-up questionnaire data was obtained. This extended time period allowed a considerable level of pre-course questionnaires to be obtained by the end of the data collection process but post and follow-up questionnaire responses were not equally high.

### **2.9.2 Longitudinal attrition**

The longitudinal nature of the questionnaire data collection method necessitated that questionnaires were completed over a six-month time period, with some attrition expected due to the nature of longitudinal research (Gorard, 2003). There was indeed a clear and significant difference in participation rates between each stage of the research, with post-course and follow-up questionnaire responses remaining considerably lower than at pre-course. For the offender group, 975 pre-course questionnaires were completed (of a pool of approximately 1,100 participants arriving at the venue in time to participate), 201 post-course questionnaires and 40 follow-up questionnaires. Only approximately 20% of those completing questionnaires prior to attendance at Crash Course also completed

questionnaires immediately following course attendance. Only approximately 4% of the initial 975 completed the final questionnaire six months later. For the employee group, 285 pre-course questionnaires were completed, 120 post-course questionnaires, and 19 follow-up questionnaires. Almost 45% of those completing a questionnaire at the initial phase of research also completed the post-course questionnaire, showing a much smaller percentage dropout than for offenders. At follow-up, a 16% retention rate was observed, which again was very low but higher than that observed of offenders. This follow-up rate was similar to rates observed in previous research, such as the 20% retention rate observed at six-month follow-up for af Wählberg (2010: 108).

There are a number of possible suggestions that can be made for this large dropout rate. One of those reasons is the contact made with participants; research has suggested that retention rates are likely to increase where support can be provided, connections can be forged and communication can be maintained between researchers and participants (Sullivan et al., 1996; Ahern & Le Brocque, 2005). However, that was not made possible in this research project whereby participation was sought through face-to-face contact at pre-course, where greatest participation rates were observed, but only through electronic means at follow-up, where the greatest attrition can be observed. This was simply a result of the nature of the research project and lack of face-to-face contact with participants.

Furthermore, for pre-course questionnaire completion, individuals were able to choose to participate in the research prior to course attendance or upon their arrival at the course venue. Only a marginal percentage of course attendees completed the online version of the questionnaire. Individuals who were invited to complete a questionnaire whilst waiting for the course to begin generally did agree to take part in the research. This suggests that the use of their 'own' time, or time that can be spent performing other tasks is much less likely to be used taking part in the research than that time that is spent waiting for the course to begin, with little else to do with that time, as the later analyses may support (see chapter 7). It was only the pre-course questionnaire that allowed for this opportunity for both

groups of participants as they had already arrived at the Crash Course venue but were required to wait for the course to begin. It is logical therefore that rates of participation were highest for this pre-course phase of the research.

The considerable amount of dropout at post-course can be explained in the same way. At the end of the course individuals are able to leave immediately, leaving them free to continue tasks that they would otherwise perform and without this 'spare' time that they possessed prior to course commencement. Much fewer individuals completed this aspect of the research as they did immediately leave the venue. Even when emailed a link to the questionnaire, they had returned to their day-to-day lives requiring other tasks and likely infrequently allowing for 'spare time' to be used partaking in the research. For the employee group, however, some individuals were waiting for transport back to their place of work after the course had ended, and it was on those occasions that more individuals completed the post-course questionnaire. Supporting this suggestion, a larger percentage of employee participants completed these post-course questionnaires. Thus, the available 'free time' given to the participant pool appears to have significantly impacted upon rates of participation.

At follow-up, participants were recruited through the contact details left by those course attendees at pre-course and/or post-course. However, only a small proportion of participants taking part in those phases of the research left contact details to allow for an invitation to complete a follow-up questionnaire. Consequently, the number of potential participants available for the follow-up phase of questionnaire data collection was lower than desired. Again, the time spent completing this phase of the research would potentially be at the cost of other tasks or the loss of that time that could be otherwise spent. Thus, the follow-up participation rates were extremely low in comparison to the initial pre-course participation rates. An increase in the financial or other incentives to partake in the research may have improved this.



It is recognised that this attrition could have potential implications for analyses conducted, and discussion of those analyses should be considered in light of the attrition rates. It is possible that those responding at follow-up were most socially responsible or were atypical of the majority in some way. This limited the analyses that were conducted of follow-up data.

### **2.9.3 Attempted remedies**

A number of methods were adopted to increase this participation rate but provided little added benefit. For that period of time in which post-course questionnaires were not offered immediately after course attendance, an additional information sheet was handed out to course attendees to remind them of the post-course phase of the research with a QR code attached for easier access to the online questionnaire. For the final six months of data collection, reminder emails were sent to participants one week after the original email was sent inviting them to take part in the post-course and follow-up questionnaires for a second time.

Despite these methods of attempted increased participation, the rates of post-course and follow-up participation remained lower than desired. As a result, the longitudinal analyses must be interpreted with caution. It is recognised that the considerable dropout percentage may have led to a certain group of participants left completing all stages of the longitudinal research, potentially those most receptive to that education. The results obtained are able to present some indication of the long-term influences of such education but these limitations must be borne in mind when interpreting, discussing and reading the longitudinal analyses they have provided.

## 2.10 Summary

Following a detailed literature search, several research aims were developed in order to expand upon current research and add to gaps in knowledge of the topic area. Based upon those research aims and the wide nature of the gaps in knowledge, a mixed methods approach was chosen. Despite some criticism of mixed methods approaches (Povee & Roberts, 2015), there are several benefits to combining research methods, particularly in enhancing an understanding of a topic that little is currently known about. Consequently, a combination of questionnaires, interviews and observations were conducted to gain this wealth of data. These were conducted with a range of participants to further maximise the information gathered and the conclusions that could be drawn from analysis of that data.

Questionnaires with employees and offenders at three time points allowed for data to be collected concerning attitudes and behaviours prior to receiving driver education, immediately after receiving that education, and again six months later. A number of those driver education courses were observed to gain an understanding of the material within those courses and individual responses to the information within them. These were combined with interviews from those same individuals to gain a more detailed understanding of the experience of attending such education, as well as the processes prior to and following that attendance. In addition to this, interviews were conducted with police officers and course presenters themselves to obtain a wider understanding of the experiences and processes surrounding an identification of offender behaviour and delivering Crash Course as a form of driver education. The data gathered from both the interviews and questionnaires were analysed separately before being brought together and further analysed.

Finally, this chapter highlighted a number of issues experienced throughout the data collection process, and attempted remedies to overcome those issues. The following

chapters will highlight additional literature in the area as well as those analyses that were performed of the data collected.

## **Part two - Attempts to tackle mobile phone use while driving**

The use of a mobile phone while driving has been clearly identified as having implications for the safety of road users (Törnros & Bolling, 2005; WHO, 2011). Consequently, the action has been afforded a range of responses both politically and institutionally. Part two of this thesis explores various road safety strategies that have been used in response to the use of a mobile phone while driving. Their use will be discussed in relation to their underlying rationale and relative success in reducing mobile phone use while driving and improving road safety more generally, with some strategies showing greater success than others.

The introduction of legislation and the policing and enforcement of behaviour in relation to that legislation will be discussed in terms of the way that legislation has been developed and the meaning it gives to both road users and those policing behaviour on the roads, as well as how the use of a mobile phone while driving has been policed and the legislation has been enforced. Issues surrounding the development of legislation will be highlighted, principally in relation to the developing nature of mobile phone technologies and the implication that has for both drivers and police officers expected to remain informed of the behaviours that constitute such an offence. The use of various enforcement practices and penalties will be discussed as an attempt to deter individuals from performing the action, alongside their success in reducing observed handheld mobile phone use while driving.

Following this, the use of education in varying ways will be highlighted. Various forms of education have been previously evaluated in a range of ways, failing to allow for a universal comparison of their success. Still, an attempt will be made to explore the differing ways in which education has been used and those most successful elements that have been adopted, both generally within road safety and more specifically in response to the behaviour of using a mobile phone while driving. Finally, one particular use of education as a road safety strategy will be highlighted – Crash Course. An assessment of the success of the course, as

defined by a number of criteria, will be presented and discussed in relation to the information presented within the chapters preceding that. This will allow for a detailed understanding of how a single educational tool has been used as both a general form of education and as a form of education as an alternative to prosecution for the offence of using a mobile phone while driving – a timely and necessary research enquiry.

## **Chapter 3: Why is handheld mobile phone use while driving illegal?**

### **3.1 Introduction**

It has been an offence to use a handheld mobile phone while driving since 1<sup>st</sup> December 2003 (The Road Vehicles (Construction and Use) (Amendment) (No. 4) Regulations, 2003), with the offence currently punishable by six penalty points and a £200 fixed penalty fine (DfT, 2016b). Following identification of the actions as having potentially severe consequences for the safety of road users, the action was afforded political attention that led to the development of this legislation. This chapter will explore legislation surrounding the offence, both in terms of *how* the potentially hazardous action was responded to with legislation, as many risky road user behaviours have been, how it is presented as a legislative document and how that legislation has been put into practice within the roads environment.

In addition to this, however, there remain some elements of mobile phone use while driving that can be legally performed, potentially creating difficulties for both drivers and police officers in recognising the safest ways to behave on the roads. The physical distraction associated with illegal handheld mobile phone use while driving will be contrasted with the cognitive distraction caused by hands-free mobile phone use in terms of the complications in using legal requirements as guidelines for behaviour. Whilst hands-free mobile phone use while driving remains a legal action, legality does not always equate with safety, as will be discussed.

### **3.2 The development of legislation**

The decision to develop legislation surrounding the behaviour of using a mobile phone while driving was made over a number of years, with much research (Burns et al., 2002), experimental analysis (Strayer et al., 2003), behavioural observation (DfT, 2015a) and

legislative campaigning (RoSPA, 2002a) taking place before this legislation was developed. A news article from the Birmingham Evening Mail reported on a driver killing an individual in another vehicle as a result of mobile phone use while driving as early as 1988 (RoSPA, 2002a: 10). Despite this, until 2003 the use of a mobile phone while driving only had legal implications when it had a noticeable impact on driver behaviour, frequently only after death or injury resulted. The 1999 revision of the Highway Code required the Government to consider the legal implications of the dangers of mobile phone use while driving. At this time, they suggested that sufficient prosecution could be made against those using a mobile phone through offences of dangerous driving, careless driving and failing to exercise proper control of a vehicle (Butcher, 2016).

The following year, within the road safety white paper ‘Tomorrow’s Roads – Safer for Everyone’ (DETR, 2000), more effective law enforcement was described as necessary for a number of offences but that current enforcement for mobile phone offences was sufficient. The report stated that mobile phone use while driving did not require specific legislation against the offence but that the behaviour should be monitored to assess whether current police powers and educational campaigns would be successful enough to reduce mobile phone use (p. 24).

A number of research reports were published within the next two years that highlighted the dangers of using a handheld mobile phone while driving (Burns et al., 2002; RoSPA, 2002a). These combined with RoSPA campaigns in encouraging a government consultation on the behaviour (AA, 2009). A number of these were cited within the consultation for the behaviour as reasons for the necessity to introduce a specific handheld mobile phone law in the UK (DfT, 2002). One of these cited pieces of research presented findings from several studies showing how and why mobile phone use while driving could impact upon driver behaviour (RoSPA, 2002a). It also identified 20 road deaths in the UK that had been reported as specifically caused by a driver using a mobile phone. The information presented in the report highlighted how mobile phone use while driving could

be hindering proposed reductions in the number of road deaths and injuries on UK roads. The public also showed support for the banning of handheld mobile phone use (Burns et al., 2002: 13).

Following this, the offence of using a handheld mobile phone while driving was both proposed and accepted, with an initial penalty of a £30 fixed fine (DfT, 2002). When brought into force on the 1<sup>st</sup> December 2003, legislation surrounding the use of a mobile phone while driving stated the following:

“(1) No person shall drive a motor vehicle on a road if he is using— (a) a hand-held mobile telephone; or (b) a hand-held device of a kind specified in paragraph (4).

(2) No person shall cause or permit any other person to drive a motor vehicle on a road while that other person is using—

(a) a hand-held mobile telephone; or (b) a hand-held device of a kind specified in paragraph (4).

(3) No person shall supervise a holder of a provisional licence if the person supervising is using—

(a) a hand-held mobile telephone; or (b) a hand-held device of a kind specified in paragraph (4), at a time when the provisional licence holder is driving a motor vehicle on a road.

(4) A device referred to in paragraphs (1)(b), (2)(b) and (3)(b) is a device, other than a two-way radio, which performs an interactive communication function by transmitting and receiving data.”

(The Road Vehicles (Construction and Use) (Amendment) (No. 4) Regulations 2003: 1).



From this, it can be understood that an offence is committed where a handheld mobile phone is used by an individual whilst driving. Actions such as sending a text message or holding a phone to one's ear, that require an individual to physically take their hands away from the task of driving, clearly constitute an offence; in such circumstances the device is easily understood as being handheld and being used concurrently with movement whilst driving. Other actions and non-movement are more difficult to understand in relation to this legislation, as will be discussed below.

The offence is identifiable by police patrols, not currently policed by any technological alternative to physical police presence<sup>20</sup>. It is therefore generally reliant upon an individual officer to identify when an offence has been committed and report an individual for summons. Although the associated penalties have increased (see chapter 4), this legislation has remained unchanged since its introduction in 2003.

There is currently no UK legislation specifically prohibiting the use of a hands-free mobile phone while driving, although the behaviour can form the offence of breach of requirements as to control of the vehicle if a noticeable impact upon driver behaviour is observed (The Road Vehicles (Construction and Use) Regulations, 1986). Despite acknowledgement of its dangers, hands-free mobile phone use was excluded from legislation as a result of a difficulty in policing such behaviour:

“The Department recognises that research shows that using a hands-free phone is also distracting and increases the risk of having an accident. We have considered whether a specific offence should include hands-free phones but believe that such a provision would be largely unenforceable. We do not

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<sup>20</sup> Safety camera vans and spotters are currently being used to identify the offence, but these continue to rely on the physical presence of an individual to identify an offence, rather than being technologically policed.

therefore believe that it would be practical to include hands-free phones within the scope of the proposed new regulation.” (DfT, 2002: 1-2)

Although there were limited hands-free possibilities during the initial development of mobile phone use legislation, it was the difficulty in policing those actions that prevented its inclusion in legislative documents, not those technological possibilities. Despite this attempt to simplify the policing of mobile phone use while driving by including only its more visible, obvious handheld form, various issues associated with mobile phone use while driving and attempts to police its existence using current legislation *do* exist.

### **3.3 Technological developments and the law**

In 2003, when the legislation prohibiting handheld mobile phone use while driving was introduced, a mobile phone was a very different device to the devices available now. Used primarily for making calls and sending text messages, the mobile phone could do little else effectively (Ling & Haddon, 2003; Agar, 2013). Some mobile phone developments had allowed for the introduction of a camera and gaming facilities, although these were not as they are today. A low-resolution camera and single game was likely all that could be found on a ‘high-tech’ mobile phone at this. It was also in 2003 that 3G Internet connections were introduced to mobile phones, progressing beyond the limited data transmission capabilities of 2G networks (Ofcom, 2004). However, their use was not instantly widely recognised and was not widely sought after by consumers (Vodafone, 2013).

Indeed, in 2003, the provision of technological developments within mobile phones was shunned, described as both unnecessary and unused by the general public within an article from *The Guardian* (2003), and instant messaging described as failing in comparison to the success of SMS messaging (Jenson, 2005: 305). Consequently, the issues surrounding mobile phone use while driving primarily concerned the use of a phone for handheld phone calls and texts rather than any other ‘interactive function’ when the legislation was

introduced (RoSPA, 2002a; The Road Vehicles (Construction and Use) (Amendment) (No. 4) Regulations 2003: 1).

Furthermore, the relationship that individuals had with mobile phones at this point in time was less likely one of addiction and necessity, as it is described today (Carbonell et al., 2013). Since the early 2000's, mobile phone ownership and Internet use more generally has expanded significantly, with an increase from 75% in 2003 to 95% in 2016 for the number of households within the UK owning mobile phones (ONS, 2017). The mobile phone now offers a multitude of capabilities that only act to enhance the attractiveness of such a device, and consequently its addictive existence in social life (Cheever et al., 2014). Functions such as social media usage, traffic updates and satellite navigation commands are all now possible through the mobile 'phone' (Salehan & Negahban, 2013; George et al., 2018). They allow instant communication with individuals from anywhere across the globe with a device that can be carried with us wherever we go. They can be used to contact friends and family as well as business contacts, or even now to update diaries, make appointments, email colleagues or simply take photographs of those attractions we may visit anywhere across the globe. As this legislation has not been amended since its introduction in 2003, but technological developments have continued at an ever-increasing pace, it is of no surprise that the legislation appears fundamentally outdated.

Whilst mobile phone use while driving legislation prohibits the 'using' of a handheld mobile telephone (The Road Vehicles (Construction and Use) (Amendment) (No. 4) Regulations 2003: 1), with the increasing possibilities for mobile phones, today it is much more difficult to define those actions that are considered the 'use' of a mobile phone. Furthermore, understanding what constitutes a handheld mobile phone, a handheld mobile device, and an interactive communication function is complicated.

In an attempt to provide some information regarding these questions, the legislation does provide a definition of a handheld device and that of an interactive communication function:

“For the purposes of this regulation—

(a) a mobile telephone or other device is to be treated as hand-held if it is, or must be, held at some point during the course of making or receiving a call or performing any other interactive communication function...

(c) ‘interactive communication function’ includes the following:

(i) sending or receiving oral or written messages;

(ii) sending or receiving facsimile documents;

(iii) sending or receiving still or moving images; and

(iv) providing access to the internet.”

(The Road Vehicles (Construction and Use) (Amendment) (No. 4) Regulations 2003: 2).

The addition of this information allows for a somewhat more comprehensive understanding of those concepts. To be considered handheld, a device must be physically held, not simply touched, at any point of the duration in which an individual is driving, or supervising a driver. This allows for a distinction between handheld and hands-free devices. An interactive communication function refers to the sending or receiving of a range of messages including videos and documents, and Internet access for any reason. In addition to the obvious use of a mobile phone for phone calls and text messages, these definitions outline a variety of other actions that may be considered an offence under such legislation.

However, as much as additional information is provided here to enhance an understanding of these aspects of the legislation, the definition of ‘using’ a mobile phone is not provided

and therefore remains undetermined. Although a handheld device is stated as being defined as such when it is required to be held during any point of interaction with the phone, it is not obvious whether the reading of a message on a phone lying on a passenger seat or the holding of a phone to move it from one part of the car to the other constitutes an offence.

Phones also now allow for a multitude of possibilities that are not explicitly covered by this legislation. Applications can now be downloaded to handheld devices that allow multiple actions to be performed without any communicative aspect. For example, games can be played, movies can be watched, videos can be recorded, calendars and diaries can be updated. Tablet devices can provide similar functions. The ‘interaction communication function’ that this legislation describes is not necessarily required or observed in their use. Smart watches provide many of these capabilities that exist within phones but are *worn* and *touched* rather than *held*. Thus, this legislation fails to adequately account for the use of such devices.

Furthermore, mobile phones can be used as devices such as satellite navigation systems and music devices that may otherwise be used legally within vehicles, creating additional complications for understanding what actions can be performed legally and those that cannot. The proposal for the offence of using a mobile phone while driving stated that “there is no intention to prohibit the use of in-vehicle equipment that has been designed to support the driving task” (DfT, 2002: 5). Although the mobile phone was not developed for these purposes, nor do they necessarily constitute in-vehicle equipment, at the given time in which an individual is using a mobile phone within a vehicle for the purpose of mapping, satellite navigation or as a music system, it may be seen as exactly that – a piece of in-vehicle equipment intended to support the task of driving.

When used as these devices, a mobile phone may be held, however, it may be inserted into a cradle and simply touched, or it may be placed elsewhere in the car and simply observed. This does not necessarily constitute ‘use’ of a phone and certainly does not require a device

to be handheld, but the obvious visual distraction can easily be recognised. Even within the vast array of actions that a mobile phone can perform, there are various ways in which each single *action* can be performed. Understanding whether an action is legal or not is deeply embedded with complications that are only enhanced when considering the multitude of ways a mobile phone can now be used.

Even when they *are* held, there are some aspects of mobile phone use while driving that continue to remain confusing in relation to their il/legality. A mobile phone can now be used as a method of payment when bankcard details are inputted, with payment at drive-thru restaurants ensuring that the mobile phone is used whilst the car is being used. This raises issues for understanding what constitutes ‘driving’ as well as what constitutes a ‘road’. For vehicles that have automatic stop/start technology, an ignition may be off whilst a car is stopped in traffic or at traffic lights but can be restarted simply by touching the accelerator (Volkswagen, n.d). Some vehicles do not even require a key to start the ignition but are simply switched ‘on’ at the touch of a button, questioning whether it is in ‘use’ or not and whether an offence is committed when a phone is used under such circumstances.

The majority of these activities would not have been possible when mobile phone use while driving legislation was introduced, and where they would have been, they would not likely have been possible with as great success as they are today, reducing the likelihood of an individual choice to adopt such behaviours. The uncertainty of a large percentage of actions that can be conducted on a mobile phone in falling into a single category of ‘legal’ or ‘illegal’ raises concerns. Considering legislative documents and governmental websites is not enough to define the legality of these actions, even from an academic perspective, as highlighted throughout this chapter, yet the lay public remain expected to do just that. This raises concerns for behaviour on the roads and the application of this legislation to behaviour.

### **3.4 Questioning the safety of legality**

As previously mentioned, there is no specific legislation that prohibits hands-free mobile phone use while driving. This is problematic given the aforementioned research findings that the cognitive distraction associated with hands-free mobile phone use while driving leads it to have as great impacts upon driver behaviour as that handheld mobile phone use that is prohibited. The concealed nature of cognition dictates that the cognitive distraction of hands-free mobile phone use while driving is more difficult to acknowledge and understand, as well as detect, than the physical act of holding a phone to one's ear or visual act of reading a text message.

Furthermore, the ever-growing possibilities afforded by mobile phones increases not only the handheld but also the hands-free capabilities that such devices provide. Many of the actions that can be performed on a mobile phone can now be done so through a hands-free method, allowing for the sought-after applications associated with mobile phones to be used in a legal manner. While mobile phone technology has developed, so too has in-vehicle technology that attempts to provide drivers with the functionality of a mobile phone. This technology is said to improve the driving experience whilst maintaining legal driving (Halfords, n.d.). However, research into many of these devices has shown that they may not actually always improve a driver experience or maintain driver safety due to the added distraction that they provide (Young & Regan, 2007; Strayer et al., 2014). Through a number of studies, Strayer et al. (2014) concluded that in-car technologies provide similar cognitive distractions to hands-free mobile phone use and may therefore affect driver performance and safety contrary to previous assumptions.

In an assessment of cognitive workload through on-road, driving simulation and laboratory experiments, listening to email and text messages through an in-car speech device was rated by participants as 2.2 out of 5 on a cognitive distraction scale. Composing short messages in reply to these messages increased the cognitive workload to 3.1 out of 5. Siri-based

interactions, used with Apple devices, that had been manipulated to ensure hands-free and eye-free task capability were rated 4.2 out of 5, the highest of all cognitive tasks assessed. With increased cognitive load came greater impacts upon driver behaviour. When asked to perform tasks on a Siri-based hands-free device, brake reaction times to in-front car braking were slower and car following distances increased in an attempt to compensate for this. Reaction times remained more greatly increased than the compensatory behaviour of increasing the following distance.

Whilst the legality of hands-free phone use gives the impression that it is safer than handheld mobile phone use, when holding a telephone conversation this does not appear to be the case. Still, the legality of these actions does influence perceptions of hands-free mobile phone use while driving. Whilst the 2015 British Social Attitudes Survey (DfT, 2017b) reported that 90% of individuals disagree that it is safe to talk on a handheld mobile phone while driving, the same BSAS report also showed hands-free mobile phone use while driving to be less of a concern for the general public; a much lower 48% of individuals agreed that the use of any type of mobile phone, including hands-free devices, whilst driving was dangerous (DfT, 2017b). White et al. (2004) found the perceived risk of handheld mobile phone use to be considerably higher than that of hands-free, with shaving or applying make-up whilst driving perceived as almost as dangerous as making a handheld call, but hands-free mobile phone use perceived as less dangerous than sneezing whilst driving. As may be expected given these perceptions of safety, research does suggest that hands-free mobile phone use while driving is more frequently adopted than handheld mobile phone use (White et al., 2010). Consequently, legality does not always equate to safety.

Simultaneously, safety does not always equate to legality – where a handheld mobile phone is used in a vehicle that is parked in a layby or pulled over at the side of the road but the vehicle ignition is not switched off, the offence of using a handheld mobile phone while driving is committed. An individual is considered ‘driving’ when the ignition of a vehicle



is switched on, even when it is stopped and the handbrake is on (RAC, 2018: para. 16), and on 'a road' when using any part of the highway that the public has access to (DfT, 2002: annex A, para 3). Whilst dictating a text message hands-free whilst driving on the motorway at high speeds is legal, answering a call at the side of the road with an ignition switched on is not. Whilst making a call to a family member to inform them of late arrival when stopped in traffic is illegal, inputting information into an inbuilt music device in order to find a particular song is not. It is the mixed array of actions that may now be performed on a mobile phone that creates these issues and complexities regarding legislation surrounding mobile phone use while driving, and subsequently understanding those actions that are both legal *and* safe. These complications for understanding the law and safety have indeed been found to exist, and when combined with a firm understanding of the benefits of the action, may only be worsening the issue on UK roads.

The 2016 RAC Report on Motoring found that 20% of drivers claimed it was safe to use a handheld mobile phone while stopped in traffic with the engine switched on for the use of social media and text messaging. 49% admitted to having used their handheld mobile phone in this way. Furthermore, the number of individuals admitting to using a handheld mobile phone while driving for the use of a phone call had increased considerably, from 8% in 2014 to 31% in 2016 (RAC, 2016). Thus, legislation does not appear to be fully comprehended by many road users and appears insufficient in preventing the offence of using a mobile phone while driving from being adopted.

An increasing number of individuals admitting to using a handheld device whilst driving creates concern for the ability for this legislation to improve road safety. Even where individuals refrain from using a handheld device whilst driving, individuals may choose to adopt a hands-free alternative that is associated with a range of distractive qualities but is not risky to the driver population in terms of *penalty* risk (despite its continue *safety* risk). Legislation prohibiting handheld mobile phone use while driving consequently appears to simply channel individuals away from one form of unsafe behaviour and towards another.

A more detailed exploratory investigation of this legislation and its implementation on UK roads will continue to be explored throughout this thesis.

### **3.5 Summary**

Although legislation has prohibited the use of a handheld mobile phone while driving for over a decade and a half, the behaviour has not ceased to exist on UK roads (RAC, 2016). One of the greatest issues in relation to this is an understanding of what constitutes the offence of using a handheld mobile phone while driving. The legislation that was introduced in 2003 has not since been amended, despite continual advancements in the realm of mobile phone technology. Although mobile phones can now perform an array of actions, ranging from video calling to satellite navigation, understanding how they can and cannot be performed within a vehicle is not simple through the use of outdated legislation. That legislation consequently fails to adequately reflect a variety of actions that can be performed using a mobile phone and their legal status.

These issues are exacerbated by the legality of hands-free mobile phone use while driving, necessitating a firm understanding of the distinction between handheld and hands-free. Although a seemingly simple difference, the touching or observation of a mobile phone in different areas of a vehicle appears to represent different forms of (il)legality. Furthermore, the use of a hands-free mobile phone has been found to be equally distracting as that of a handheld device due to its cognitive requirements (Strayer & Johnston, 2001), despite the legal nature of its existence. Consequently, safety and legality are not one and the same thing in terms of this traffic legislation. An individual can find themselves acting in a less safe manner legally than they would be when acting illegally. Clearly this raises concerns for the way in which the offence has been policed and the various ways in which it has been used in an attempt to enhance road safety.

## **Chapter 4: Road safety in a law enforcement context**

### **4.1 Introduction**

Deterring criminal behaviour has obvious benefits for society. This chapter will begin with a brief discussion of the use of deterrence and law enforcement strategies within the environment of the roads<sup>21</sup>. The use of fixed penalty fines and points as a method of deterrence will be explored in an attempt to understand the success of law enforcement and deterrence through roads policing strategies. Their use will be explored in terms of the certainty, speed and severity in which an offence is identified and punishment is presented – those features of law enforcement that deterrence theory highlights as central to deterring deviant or offending behaviour (Homel, 1988).

For the offence of using a mobile phone while driving, penalty points and fines have been used as a law enforcement strategy of deterrence, increasing in level over the years since the introduction of the offence (DfT, 2015b). Their use and success will be discussed in relation to issues surrounding roads policing funding reductions and the changing nature of mobile phone technologies.

### **4.2 The theory of deterrence**

When applied to the criminal justice system, deterrence generally refers to the use of punishments or sanctions in an attempt to reduce the likelihood of particular behaviours being adopted, with the underlying notion that individuals seek to find pleasure and avoid pain (von Hirsch et al., 1999). As such, individuals are presumed to make rational decisions to behave in particular ways in order to experience the benefits and avoid the consequences associated with those actions.

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<sup>21</sup> The next chapter will consider deterrence in relation to education.

There are a number of prerequisites required in order for a behaviour to be suitably deterred according to the theory of deterrence; the swiftness, certainty and severity of punishments related to deviant behaviour must all be recognised and understood as forming a risk high enough to warrant avoidance (Homel, 1988). More specifically, legislation and sanctions associated with non-compliance must be understood and the perceived likelihood of detection of non-compliance must be high in order for an action to be deterred (Nagin and Pogarksy, 2001; Wikström et al., 2011). Alongside this, the punishment associated with non-compliance must be received within short duration of the offence being committed and it must be a severe enough response to that offence to present a higher cost than the overall benefits (Pratt & Turanovic, 2016).

In order to further understand deterrence theory, it has frequently been split into two subtypes of deterrence that play different, albeit intertwined, roles and have differing influences upon behaviour. Firstly, specific deterrence describes personal experiences of punishment and their ability to reduce future offending (Stafford & Warr, 1993: 123). An experience of harsh punishment in particular is expected to reduce the likelihood that an individual will wish to perform that same act again due to the severity of that punishment (Abrams, 2011). One of the ways in which attempts have been made to enhance the perceived costs of criminal activity is to increase the punishments associated with a given crime (Dana, 2001). In acting rationally, it can be argued that the cost of an action increases as its penalties do, providing that all other components of deterrence theory are held constant. Others have argued, however, that the severity of the punishment must be in accordance with the severity of the crime (Carlsmith et al., 2002), with overly harsh penalties being an ineffective response to offender behaviour.

Secondly, general deterrence refers to a fear of punishment resulting from an indirect threat of punishment to the general public (Stafford & Warr, 1993: 125). Whilst perceptions of the costs and benefits of offender behaviour may be obtained from a variety of sources, these personal and vicarious experiences with the police have been described as having particular influence when considered in terms of deterrence theory (Fildes & Lee, 1993). The visibility of policing and/or the punishment associated with offender behaviour provides a demonstration to other individuals that the costs associated with offending are real and should be avoided through compliance (Nagin, 1998). Rather than simply predicting what might happen if an individual is caught committing an offence, they are able to observe the consequences in another and make a conscious decision whether or not to risk experiencing those consequences. Alternatively, observation of criminal behaviour with no legal consequences will enhance perceptions that the costs associated with offending behaviour are low, decreasing the likelihood of deterrence (Stafford and Warr, 1993).

Alongside this distinction between specific and general deterrence, deterrence theory has been researched, manipulated, edited and redeveloped in a number of forms over the last few decades in order to account for different ways in which deterrence may be experienced. In particular, Stafford and Warr (1993) proposed an extended deterrence theory that suggested four main components to deterrence: the direct experience of punishment, the direct experience of punishment avoidance, the indirect experience of punishment, and the indirect experience of punishment avoidance. They perceived punishment avoidance as equally important as punishment itself in influencing future offender behaviour.

Others have suggested that although the penalty associated with non-compliance may not deter individuals from that failure to comply, the surrounding emotional, social and lifestyle repercussions may enhance the likelihood of compliance. Nagin and Paternoster (1993) found anticipations of shame in relation to being caught committing an offence had some influence upon the likelihood of offending, whilst Braithwaite has explored the use

of shame within criminal justice penalties for decades (1989; 1995; 2000), claiming that “individuals who resort to crime are those insulated from shame over their wrongdoing.” (Braithwaite, 1989: 1). In this way, the moral cost of offending is enhanced, with individuals aiming to avoid their moral standing being questioned by abiding by the law.

Many individual differences exist in terms of the success of deterrence and its impact upon eliciting compliant behaviour, creating difficulties in its application to and study within the criminal justice system. Nonetheless, one area that deterrence theory has been used, and that will be explored in more detail here, is that of roads policing and traffic law enforcement.

### **4.3 Deterring traffic offences**

When linked to enforcement strategies, both general and specific forms of deterrence aim to elicit an instrumental compliance to the law whereby individuals comply with the law because of a fear of being punished if they do not. This contrasts with a normative compliance to the law whereby individuals comply of a voluntary nature according to moral beliefs and a notion that the authority has the ‘right’ to dictate behaviour (Tyler and Fagan, 2008: 234-235), as will be explored in the next chapter. Thus, to suitably prompt instrumental compliance, individuals must fear the punishment of a given action.

Supporting this, the certainty of punishment, or risk of being caught committing an offence, has been described as the most influential factor impacting upon deterrence regarding traffic offending (Tay, 2005). Without a fear of being caught, the swiftness and severity of punishments hold little relevance or importance. Zaal (1994) highlighted the distinction between subjective and objective risk of detection, with the former referring to that which an individual perceived to be the likelihood of being caught committing an offence and the latter being that actual likelihood of detection resulting from the level of policing made available at any given time. Whilst the two forms of detection belief are often related, there

may be considerable differences, often with individuals believing that their risk of detection is lower than the actual risk of detection suggests (Zaal, 1994; Bates et al., 2012). This has obvious implications for road safety as the deterrent influence of law enforcement is weakened by individual perceptions of the certainty of detection.

Roads policing units and motorway policing groups may target particular offences in 'crackdowns' whereby police presence is increased and certain actions are pursued (e.g. Staffordshire Police, 2017). These methods may increase the perceived certainty of detection integral to deterrence theory through the increased visibility of police officers and therefore likelihood of being caught committing an offence where one is committed, in the hope that individuals will be deterred (Nagin and Pogarksy, 2001). However, such 'crackdowns' are generally of short duration, something the public are made aware of (BBC, 2017).

Whilst the deterrent influence of increasing the certainty associated with offending behaviour may reduce offending for a short duration, its impact is unlikely to provide any longer-term benefits without a continued perception of high police presence and therefore detection. This has been termed the 'time halo effect', descriptive of those benefits to deterrence for only a limited amount of time (Hauer et al., 1982: 267). Vaa (1997) found that this 'time-halo effect' was evident for up to eight weeks after the removal of an enforcement strategy but claimed that it should not be expected to last any longer than this. The persistent requirement of the certainty element of deterrence, rather than infrequent boosts, has been identified by the House of Commons (2016a) as essential to the success of road safety, despite a recognition of the decline in roads policing officers within the same document. Without police officers able to identify offending behaviour, the certainty of punishment is likely to decrease dramatically, again, limiting the effectiveness of deterrence as an attempt to improve road safety.

Even where the police or 'policing technologies', such as speed cameras, are visible, this time, or distance, halo effect may still be observed for *some* drivers – individuals may continue to reduce speeds, use a seatbelt or refrain from using a mobile phone while driving in areas that known enforcement strategies are being used but adopt offending behaviour where that enforcement is not observed (Vaa, 1997). Hauer et al. (1982) and Corbett (2000) found this true of speeding for a small subset of drivers who manipulated speed cameras, conforming to the speed limit for short time periods at which the risk of detection is highest, such as at speed camera sites. This deterrent influence may therefore only exist for a short time period or distance from the last visible presence of law enforcement strategies. Whilst the perceived (and actual) certainty of detection is high in such areas whereby law enforcement practices can be observed, perception of detection likely lowers once that visible law enforcement strategy can no longer be detected.

Stafford & Warr (1993) have proposed the importance of punishment avoidance within deterrence, with researchers since having applied it to traffic offending. In support of Stafford & Warr's proposition, Watson (2004) found that punishment avoidance was the strongest predictor of offender behaviour in terms of driving without a licence. In his study, almost 37% of participants avoided being caught by the police on one or more occasions when they could have been. This had a considerable influence on their likelihood of repeating the behaviour, as those that had previously escaped evasion likely presumed future avoidance was also likely. Social involvement with other drivers who drove without a driving licence and perceived social disapproval of the behaviour were also important factors in explaining the likelihood of performing the driving offence (Watson, 2004).

Where the likelihood of detection is at a level that provides a credible risk, the severity of the punishment associated with offender behaviour is also likely to be of greater relevance to one's road user behaviour (Zaal, 1994). In consideration of speeding offences and increases in fixed penalties in Norway, Elvik and Christensen (2007) found that there was some benefit to such an increase. However, this benefit was only observed for a short



distance following known enforcement strategies such as speed cameras, supporting the distance halo effect proposed by Vaa (1994). The impact of the increased penalties was not universal or even considerable at speed camera sites, suggesting that the use of a more severe penalty does not necessarily create any greater deterrent impact upon driver behaviour. The severity element of deterrence theory has therefore not been afforded universal support in relation to the roads environment, particularly where it is unrelated to the certainty aspect of deterrence.

The swiftness, or celerity, of punishment associated with offending has been afforded much less attention than those notions of certainty and severity, with an understanding of its importance in deterring traffic offences remaining extremely low. In one of only a small number of studies assessing celerity within traffic offending situations, Nagin and Pogarsky (2001) concluded that it was the least successful of the three components of deterrence theory in predicting offending behaviour. In an earlier study, Yu (1994) found an inconsistency in the effect of celerity, with swift punishment generally successfully able to deter the general public and first time offenders from drink driving, but being less useful in explaining the behaviour of repeat offenders. Thus, those that are more willing to commit an offence on multiple occasions, or may have previously avoided detection, may be less concerned with the swiftness of a punishment than other drivers. As there is little that can be done to manipulate the speed associated with the receipt of punishment of traffic offences due to the necessity of processing before punishment is received, a lack of research in the area is likely to continue. Still, a focus upon the certainty and severity of punishments can be explored in more detail in terms of responses to traffic offending.

#### **4.4 Traffic penalties as deterrence**

The punishments associated with traffic offending range in nature, from a verbal warning to court proceedings. Those most frequently observed, however, are the use of penalty fines and penalty points as a demerit on an individual's driving licence (Gov.uk, 2015). In terms

of specific deterrence, these penalties impact upon drivers in two primary ways - through monetary and social value, with the former closely linked to the provision of penalty *fin*es and the latter to penalty *point*s and the overall experience of 'offender' identification.

O'Malley (2010) refers to the use of monetary fines such as those penalty fines experienced within traffic law enforcement as the 'monetization of justice' (p. 801). He highlights the frequent nature in which monetary penalties have been used throughout the history of traffic offending. Drivers represented a group of individuals who could afford the privileges of owning a vehicle and being able to drive, and were therefore seen as able to pay a monetary fine, and risked severe consequences if that fine was not paid (Fox, 1995; O'Malley, 2010). However, issues regarding the use of such fines as simply 'revenue-raising' strategies were raised (Taylor, 1999: 125), with both members of the public and government departments highlighting the need for monetary penalties to be used for more than simply police force benefit (Gov.uk, 2015; IAM, 2015; House of Commons, 2016a).

In addition to this, the use of penalty fines as a deterrent has been questioned by research showing that an increase in fine amounts has not led to an increase in compliance with the law. Elvik and Christensen (2007) found that increases in fixed penalty fines had no deterrent effect upon speeding behaviour and Lawpoolsri et al. (2007) found that those drivers who had received a penalty fine for speeding were more likely to be caught committing the offence again than the general driver population, suggesting no clear deterrent effect of the use of such penalties. Whilst the existence of fines as a penalty may be enough to deter *some* offending behaviour (Bjornskau & Elvik, 1992), where those fines already exist, their increase appears unlikely to provide any additional deterrent value to behaviour on the roads. As Zaal points out:

These drivers know that their speeding behaviour is illegal, but still continue to drive in such a manner because the receipt of a fine is often regarded as little

more than an inconvenience rather than a deterrent and strong message to modify their behaviour. (Zaal, 1994: 108).

An inconvenience can easily be overcome or forgotten, leaving the increase in penalty fines unlikely to reduce offending behaviour any more than simply their existence does. The use of fines may therefore act as a specific deterrent for first time offenders or a method of general deterrence for the driver population as a whole, however, they appear less effective for repeat offenders (Zaal, 1994) or those who are not concerned about the financial cost of such a penalty - as O'Malley writes, "if we are willing and able to pay the price, then there is nothing to restrict repeat offending" (2010: 802).

The associated anonymity, transience and inconsequential social impact of penalty fines is likely to exacerbate this. Whilst penalty fines can be received and paid with little consideration of the offence, how it was committed, why it was committed, and the social impact of such a fine, other penalties such as demerit points on an individual's licence have a longer lasting, more visible impact. With only a restricted amount of accumulated offending allowed before the penalties, and therefore the risks, associated with offending are much greater than a fine, penalty points may act as a greater deterrent for repeat offenders, particularly those who rely on their driving licence, for example for work or family purposes.

The social value of these penalties is associated with the initial experience of being caught committing an offence *as well as* the receipt of penalty points that remain on the driving licence for a given period of time. For some, it can be an emotional and shameful experience that allows their behavioural choices, rational ability to make those choices and moral guides underpinning those choices to be questioned by another individual (Braithwaite, 1989; Corbett & Simon, 1999). For those that do not require a clean driving licence or do not have as great a social connection to that licence, however, the use of penalty points as a form of punishment is likely to have less relevance.

Still, in its nature as an accumulative punishment, penalty points may also act as a deterrent for those concerned about the more severe punishment of a potential loss of licence. Corbett and Simon (1999) found penalty points to be the most likely penalty to result in changes to driver behaviour following prosecution for a speeding offence (in comparison to fines and the embarrassment of being caught) and Corbett et al. (2008) reported that the reconviction rate, supported by focus group discussion, following identified speeding behaviour was low enough to conclude that the threat of disqualification *does* work in some way to reduce offending. Castillo-Manzano et al. (2010) reported a notable reduction of 13% in the number of deaths on the roads following the introduction of a penalty points system, suggesting that behavioural changes had resulted from its introduction. However, the benefit of penalty points systems does not appear long-lasting, with a period of one to two years following introduction of their use being succeeded by no significant benefit to injury and death resulting from traffic collisions (Butler et al., 2006; Castillo-Manzano et al., 2012).

Mehmood (2010) considered the introduction of the penalty points system in a city in the United Arab Emirates. He found that speeding was not significantly different between the three months before and after introduction of the system, although he suggested that a more effective monitoring system would have improved its success. When combined with other methods, such as increased surveillance and publicity, enforcement in terms of penalty points systems may work more efficiently (Izquierdo et al., 2011). Whilst the introduction, and the increase, in penalty points systems as a response to traffic offending may appear useful in deterring offending behaviour, these are likely observed alongside the use of increased enforcement practices and other strategies used to deter offender behaviour, such as education. Where that increased enforcement practice is only short-term, the benefits of the use of penalty point systems and other penalties are also likely to remain as short-lived. It is possible that demerit systems fail to be supported by the enforcement practices required for their effectiveness.

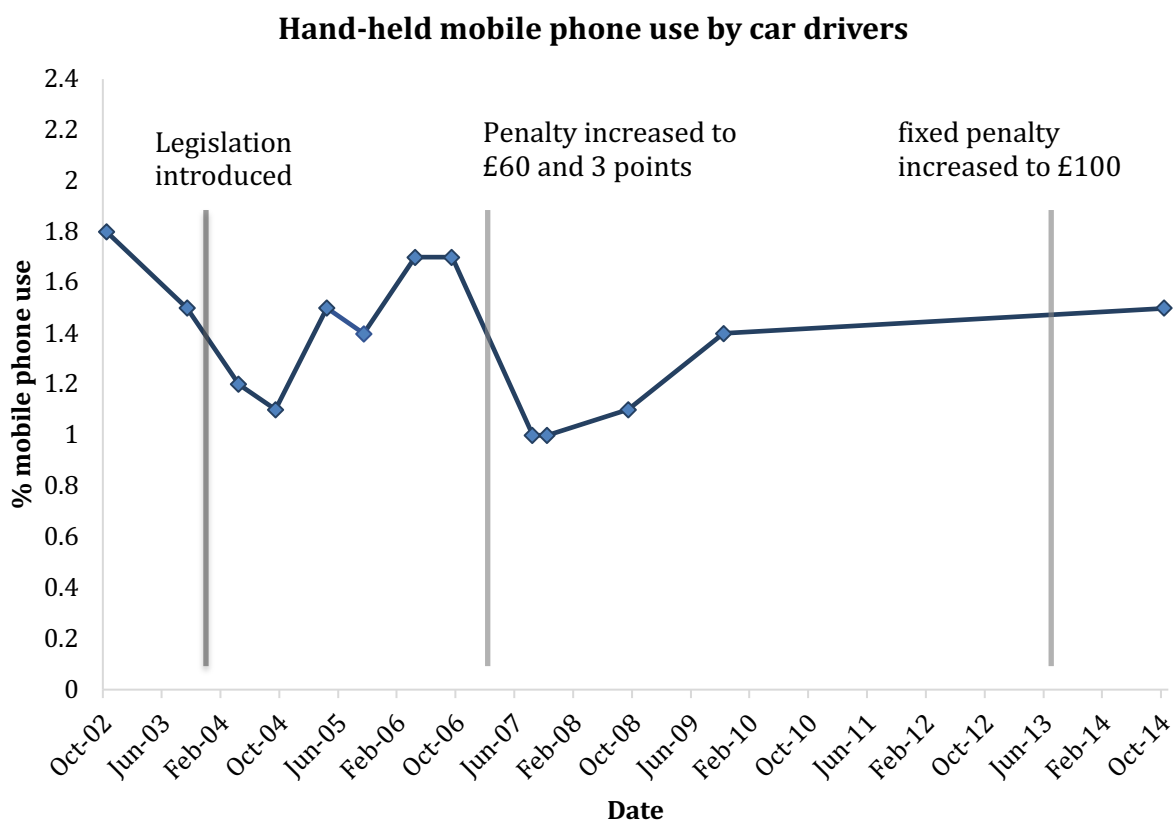
Despite these mixed findings regarding the success of penalties such as points and fines, their use continues to be adopted and supported as a response to offending behaviour (The Road Traffic Offenders Act 1988 (Penalty Points) (Amendment) Order 2017). In a government response to a report on road traffic law enforcement, a continued use of such penalties was described as necessary for traffic offences (House of Commons, 2016b: 7). Responding to a suggestion that the legal drink drive limit should be reduced to zero units of alcohol, the government response paper stated: “we have no current plans to change the drink drive limit. The Government believes that rigorous enforcement and serious penalties for drink drivers are a more effective deterrent than changing the drink drive limit” (House of Commons, 2016b: 5). Whilst they may be correct in their assertion that rigorous enforcement is an effective deterrent, there is no supporting evidence to suggest that such rigour is currently being provided in the area of traffic law enforcement. One of the primary issues relating to any law enforcement strategy is the lack of presence of those able to enforce such law. This can be seen in the roads context where police funding has recently been cut and roads policing officers reduced (House of Commons, 2016a).

#### **4.5 Law enforcement in the context of mobile phone use while driving**

Both penalty fines and penalty points have been used as punishments for the offence of using a mobile phone while driving. Although the initial penalty associated with the offence was only a £30 fixed penalty fine, the Government did intend to make the offence endorsable upon review of road traffic penalty legislation after its introduction (RoSPA, 2002b). This indeed did take place, with increases in the initial penalty observed a number of times since, allowing the current penalties to exist in the form of a £200 fixed penalty fine and six penalty points on one’s licence (DfT, 2016b).

The changes in these penalties can be considered alongside observed offending rates through reports provided by the DfT. Repeated observations of mobile phone use while driving by the DfT (Walter, 2010; DfT 2015a), as presented in figure 4.1, have shown that 1.8% of car drivers were observed using a handheld mobile phone while driving in October 2002, prior to the implementation of legislation surrounding the behaviour. Following the introduction of mobile phone use legislation in December 2003, the rate of observed handheld mobile phone use by car drivers decreased from 1.5% in September 2003 to 1.1% in September 2004, initially suggesting that there was some benefit of the legislation in terms of handheld mobile phone use behaviour.

**Figure 4.1:** DfT (2015a) chart representing the number of car drivers observed using a hand-held mobile phone while driving between October 2002 and October 2014.



However, the following set of observations in April 2005 showed a notable increase back to a rate of 1.5% - the same as that observed prior to the implementation of legislation. With the implementation of legislation, the associated penalty was simply a £30 fine, thus

these rates of observed mobile phone use while driving suggest only a considerably short-term benefit to the introduction of legislation when used alongside such a penalty. Where some have argued that the introduction of legislation without a significant penalty is not enough to deter behaviour (Novoa et al., 2011), it appears that it is not even sufficient to provide legislation simply with a small monetary penalty, at least within this roads context and in relation to the act of using a mobile phone.

Observations of mobile phone use while driving following the increase in the fixed penalty fine and an addition of three penalty points to the punishment of the offence in August 2007 showed a drop to the lowest observed rate of 1%. The introduction of penalty points to the offence, as well as an increase in the fixed penalty fine therefore appear to have a larger immediate impact upon offending behaviour than the introduction of legislation with a smaller monetary penalty. The use of these penalties also led to a slower increase in the percentage of drivers observed using a handheld mobile phone while driving, increasing to 1.1% at the end of 2008 and again to 1.4% towards the end of 2009. Nonetheless, whilst the increase in offending rates was observed at a slower rate, it was not prevented, suggesting that whilst the use of penalty points may be more beneficial to a reduction in offending for this offence, it does not have a consistent impact upon behaviour.

The most recent observation in October 2014 showed a return to the rate of 1.5% of drivers observed using a handheld mobile phone while driving – the same rate that was observed prior to the introduction of legislation in 2003. Consequently, over the period of the decade that data are provided for, although there has been some fluctuation, there has been no overall benefit in terms of decreased mobile phone use while driving observed from the use of penalty fines and points in response to the offence.

The difficulty in recognising the true benefit of these enforcement methods alone, however, is exacerbated by the fact that these penalties are associated with various accompanying road safety strategies, processes and experiences that all impact upon the success of road

safety strategies. As will be discussed within the next chapter, a large media campaign was introduced in 2007 presenting the impacts of the action, coinciding with the increase in the fixed penalty fine and introduction of points (Angle et al., 2009a). It is important to note that it was during this time when the lowest percentage of drivers were observed using a mobile phone while driving (DfT, 2015a), suggesting that the use of multiple methods may be more effective than using a single method alone. This does, however, make it difficult to separate the effects of a particular strategy from the potential contributions of others.

Still, the short-term and limited benefit of such penalties has been described by additional research exploring their use in response to the offence of using a mobile phone while driving. Abouk and Adams (2013) conducted research exploring the introduction of bans prohibiting the use of a mobile phone while driving in various states of the United States. Although the conclusions that can be drawn from the crash data that they used are limited, the research does show a decrease in the number of fatal accidents that may have involved some form of distraction after the introduction of bans. However, after a period of approximately three months the number of fatal accidents returned to those observed prior to the ban. These findings are similar to those of the DfT (2015a) and suggest that legislation and enforcement have only a limited impact upon driver behaviour in terms of mobile phone use while driving.

Kalin (2005) recognised that whilst individuals were largely in favour of a law prohibiting mobile phone use while driving, a significant number of people were identified as breaking that law within the first two months of its introduction. Kalin suggest that this is likely the result of a lack of public fear regarding the penalty fine associated with the offence. Other researchers have found some benefit to the introduction of legislation prohibiting some form of mobile phone use while driving, although they have failed to consider the impact of varying forms of penalty upon the deterrent impact of that legislation (Ibrahim et al., 2011; Ferdinand et al., 2014). Others still have suggested a limited or non-existent benefit to the introduction of legislation (Novoa et al., 2011; McCartt et al., 2014).



As there is currently no device that is able to identify a driver using a handheld mobile phone while driving in a similar method to that of a speed camera, offenders are generally caught by a police officer that has observed their mobile phone use<sup>22</sup>. This method relies on police presence on UK roads. However, police funding cuts are leading to drastic reductions in the number of officers performing this patrol function (House of Commons, 2016a). This has clear implications for the enforcement of traffic offences that cannot otherwise be detected – 54% of drivers believe they are not likely to be caught or punished using mobile phone while driving (AA, 2018), thereby increasing the likelihood that the offence will be committed when relying upon an instrumental compliance with the law.

Whilst enforcement strategies do have the potential to have some success in tackling mobile phone use while driving, police presence is a vital element of this. However, issues with policing numbers and the short-term ability of enforcement approaches to change driver behaviour create complications in using those strategies to tackle mobile phone use while driving. As it is unlikely that policing numbers will rise significantly in the near future and that it is not feasible, or even apparently highly successful, to increase the penalties of the offence annually, other methods of tackling mobile phone use while driving may be particularly necessary now.

#### **4.6 Summary**

Offending behaviour may be deterred through the use of various enforcement strategies, with penalty fines and points being most frequently used within the roads context (Gov.uk, 2015). The severity, certainty and swiftness of punishments has been linked, through deterrence theory, to the likelihood that individuals will refrain from offending. In particular, the certainty of receiving a punishment for offending behaviour has been

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<sup>22</sup> The researcher is aware that approaches are currently being developed in this area.

described as having a considerable influence over decisions to adhere to, or break, the law (Elliot, 2003; Tay, 2005). Within the roads context, concerns of reducing police funding and roads policing presence (House of Commons, 2016a) are therefore well-founded, as they limit the likelihood of this ‘certainty’ of detection, particularly for offences that cannot be identified by technological means, such as speed cameras and ANPR cameras. This raises concern for the offence of using a mobile phone while driving.

Unfortunately, a continued level of observed offending that has failed to be significantly impacted by the introduction or increase in penalty points and/or penalty fines associated with the offence of using a mobile phone while driving suggest that they are inadequate in deterring the behaviour. Although somewhat successful as a short-term influence upon behaviour, the use of these penalties has been unable to provide any significant change in the observed number of individuals using a handheld mobile phone while driving. Where these penalties have increased in severity, additional strategies have been used alongside those within such law enforcement practices, such as an increase in visible policing. These combined influences, whilst potentially effective, are not feasible when considering the reduction in funding to police forces, necessitating further exploration of alternative strategies and how they have been used in response to the offence of using a mobile phone while driving.

## **Chapter 5: Road safety in an educational context**

### **5.1 Introduction**

Individuals are now ordinarily exposed to a number of methods of education provision in attempts to improve road safety. From television adverts to theory test information, this education is not solely targeted at drivers but also road users more generally (Think!, n.d.b). This chapter will begin by highlighting the nature of education within road safety in terms of both the *types* and *styles* of education that have been adopted. The use of methods of deterrence, as explained within the previous chapter, will be applied to education here.

The success of varying forms of road safety education will be explored in relation to the theoretical basis and style of education adopted. The chapter will then progress to a focus upon the ways in which education has been used to tackle mobile phone use by drivers; little research has focused upon education used in an attempt to tackle this behaviour, highlighting a gap in academic and public understanding of how education may or may not benefit road safety.

### **5.2 Types and styles of road user education**

Whilst deterrence is commonly associated with methods of enforcement, education within road safety *can* be understood as fitting into two broad categories of deterrence; those offered as a form of general deterrence and those offered as specific deterrence. Whilst enforcement strategies that attempt to deter in these ways are associated with instrumental forms of compliance, educational approaches attempt to elicit a normative compliance; encouraging individuals to comply with the law through moral understanding of, and agreement with, that law (Tyler and Fagan, 2008).

In terms of general deterrence, individuals are presented with a broad range of information regarding offender behaviour, its penalties and consequences in an attempt to prevent individuals from choosing to adopt that offending behaviour. These general methods of deterrence are targeted at a general population of individuals who may be inclined to commit the offence in the future, regardless of their current behavioural choices on the roads. In contrast, specific deterrence is targeted at a particular individual for an offence they have committed. When provided in the form of education, the information provided as this specific punishment-type response attempts to inform drivers of the personal, financial and legal penalties surrounding the behaviour. Road user education may therefore be seen as split into these two *types* of education.

Within these types of education, there are different *styles* of information presentation that can be used. Educational attempts to improve road user safety can generally be categorised into one of three approaches; 'fear appeals', 'emotional appeals' and 'rational appeals'. One of the most frequently utilised and academically researched style approaches to road safety education is that of 'fear appeals' (Lewis et al., 2009), also known as 'scare 'em straight' approaches. These are defined as "messages that attempt to achieve opinion change by establishing the negative consequences of failing to agree with the advocated position" (Dillard, 1994: 295). Fear appeals typically present images or video clips of death or serious injury being caused by the road user behaviour in question, presenting the consequences that can result from the behaviour. They are termed 'fear appeals' as they aim to provoke the emotion of fear above and beyond any other.

In an examination of the differential impacts of a number of educational techniques upon speeding behaviour, Goldenbeld et al. (2008) found a fear-based television advert to be more clear and convincing than a neutral informational leaflet, both the leaflet and the television advert, or no information at all. However, considerable gender differences were evident between the effects of educational approaches. Experiencing the fear appeal with no written communication was the condition in which males reported the lowest intention

to drive within the speed limit. In this condition, females reported the highest intention to drive within the speed limit. This creates a complication in understanding the way in which such an approach may be most useful in encouraging attitude and behaviour change, also failing to provide unanimous support for its existence.

Other research focusing on the use of fear appeals within road safety education has criticised its use more explicitly. Criticising their use for all social groups, Elliot (2003) found that fear appeals can cause reverse effects to those expected and should be used with great caution. He claimed that a number of factors influenced the success of a fear appeal, with the primary of those being the coping strategies advised throughout. Where these are insufficiently provided, he claimed that the fear appeal would prove unsuccessful, and even enhance the likelihood that unsafe road user behaviour would be adopted.

Rossiter and Thornton (2004) supported those findings of Elliot (2003) but discussed them in a more positive manner. They found that not only is fear an important component of fear appeals, but *fear relief* plays a considerable role in effective fear-based approaches to education. Fear-relief is a process whereby maximum levels of fear are followed by a calming stage that allows relief to supersede the fear. In measuring levels of fear throughout a road safety advert and driving simulator in a laboratory experiment, they found that provision of a fear-relief pattern provided great benefits to driver behaviour. Algie and Rossiter (2010) expanded upon this, suggesting that in order to provide the most effective fear appeals, educational approaches should contain high levels of fear, followed by fear relief, alongside recommendations for preventing the associated threat. This encourages individuals to prevent the threat rather than simply overcome the fear.

In a review of their use, Witte and Allen (2000) concluded that despite some contradictory findings, the overall evidence suggests that fear appeals have improved over time and do have the ability to provide significant benefits to attitudes and behaviour where utilised effectively.

A similar method of presenting educational information is through the use of an emotional appeal. Emotional appeals are similar to fear appeals as they too may evoke the emotion of fear, however, they also attempt to induce a much wider range of emotions than simply fear. Emotional appeals attempt to stimulate a heightened psychological arousal in order to develop a particular emotional state in those experiencing the appeal (Bagozzi et al., 1999: 192). Emotional appeals may target emotions of guilt, remorse, sadness, and even happiness, amongst many others. As with fear appeals, emotional appeals are presented in the form of images, video clips and discussion of personal experiences, which are particularly important in evoking the targeted emotions (Brader, 2006). However, emotional appeals remain greatly varied due to the vast array of emotions that may be targeted within them.

Rather than depicting the consequences of road user behaviours, positive emotional appeals generally present images and video clips of individuals making safe road user choices (Sibley & Harre, 2009). In support of positive emotional appeals, Harre et al. (2005) found that exposure to an advertisement depicting individuals choosing not to drive after drinking (a positive behavioural choice) reduced levels of self-enhancement bias in driving ability; self-enhancement bias refers to a perception of the self as better at a given task than they actually are likely to be or better than others at that task (Harre et al., 2005). Participants, particularly males, exposed to a fear appeal showed greater levels of subsequent self-enhancement than those exposed to a positive advertisement, supporting the use of positive emotion-based education, particularly for males.

From a number of conducted focus groups, Lewis et al. (2007b) found that participants particularly highlighted the need for road safety education to depict safe road user behaviour and drivers making safe choices to ensure that drivers are aware of how they ideally *should* behave rather than simply how they should *not*. This is supported by additional studies suggesting that educational approaches to road safety are most beneficial

when they present individuals with safe alternative behaviours that they should adopt or techniques to assist them with refraining from offender behaviour (Elliot, 1993; Tay & Watson, 2002; Tay, 2005). This form of educative material, however, was suggested by participants as being necessary alongside fear-based approaches rather than as an alternative to them (Lewis et al., 2007b: 68). This combined approach has the potential to allow for the relief of fear that Witte and Allen (2001) identified as essential in ensuring the success of persuasive education.

In contrast to this, rational approaches, also known as ‘information’ or ‘enforcement’ approaches, do not focus on the production of any emotion in attempts to change attitudes or behaviour. Rather, they provide the information necessary to ensure that individuals are equipped with the knowledge needed to make informed decisions. While the information may be presented in a number of formats, rational approaches to education tend to present facts and figures explaining the dangers of certain driver behaviours. They encourage logical thinking, encouraging individuals to consider both the advantages and disadvantages of a behaviour (Leonidou & Leonidou, 2009).

Research has found mixed support for the use of rational approaches in road safety education. Considering speeding-based education, Stanton et al. (2007) found that information regarding speed, gear control and acceleration improved levels of driver knowledge, driver skill and driver attitudes. However, Ker et al. (2005) conducted a systematic review of driver education and failed to show support for the use of rational approaches. They concluded that the two types of driver education that utilised rational appeals resulted in only a limited reduction in subsequent traffic offences. The use of rational approaches follows the assumption that individuals hold a deficit of information or capability regarding the topic at hand and is therefore more likely to be suited to offences that have been committed for this reason. Where a general attempt is made to influence road user behaviour, the success of this rational approach is likely to vary depending upon the action and the audience – those who do not perceive themselves to have any deficit in

understanding or skill are unlikely to benefit from such education and those who have committed offences for reasons other than this are unlikely to reduce or discontinue their offending behaviour due to the provision of such information.

Each of these three educational approaches have therefore been shown to have both more and less successful aspects. Whilst support has been given to emotional approaches, fear appeals can more frequently be observed in road safety campaign education (Think!, n.d.b) and both fear appeals and rational approaches in other forms of education (Lewis et al., 2007a; Lewis et al., 2007b), necessitating a more in-depth exploration of how education has been used in this context and the success that education appears to have had on road safety.

### **5.3 Education as general deterrent**

Within the category of general deterrence lie road safety campaigns and education provided to the general road user population, including education offered to groups of school children or employees. These educational approaches are reliant upon the general public acknowledging that the messages conveyed are relevant to them and applying them to their own driving. The New Labour government influenced the use of this form of education within road safety greatly, encouraging its use in improving road safety for all road users. In March 2000, the former Department of Environment, Transport and the Regions (DETR) published a road safety strategy entitled 'Tomorrow's roads: Safer for everyone' (DETR, 2000). This document highlighted that there continued to be an unacceptable number of people dying on UK roads and put forward a number of targets to be achieved within the next ten years alongside suggestions for achieving those targets. The promotion of safer road use was underlined as one of ten main themes of the document, deemed essential in assisting with a reduction in the number of deaths and serious injuries on our roads.



From this document the road safety campaign brand Think! was produced. The aim of this development was to provide one overarching, symbolic brand to represent various road safety communications with the unifying theme prompting road users to *think* before they act (DfT, 2015c). The communications delivered under this branding attempted to increase general awareness of road safety and deter offender behaviour. They are generally presented using graphic video/audio clips or images depicting the consequences of performing those offences or failing to consider other road users, encouraging road users to fear the consequences of certain behaviour through the use of graphic images and video clips categorises these campaigns as ‘fear appeals’. Rational approaches have also been used whereby a more detailed explanation of the offence and its associated penalties are provided alongside alternative forms of action that should be taken to avoid the consequences.

Reviews of educational campaigns have suggested that there is some benefit of campaign education to driver behaviour. In a meta-analytical review, Phillips et al. (2011) concluded that there was an overall reduction of 9% in incidents following the introduction of some form of road safety education campaign. In deeper consideration of the characteristics of campaigns, they found that drink driving campaigns had been the most successful in terms of incident reduction data. Other components that increased the success of campaigns also included; the targeting of a particular social group; combination with enforcement; a combination of emotional and rational information; and a focus upon risk of detection rather than risk of harm.

In contrast, Elliot's (1993) meta-analytical report identified persuasive, emotional-based campaigns as those that were the most successful. This finding has been supported by a number of studies and meta-analyses since (Witte & Allen, 2000; Delaney et al., 2004). In the research conducted by Elliot, the success of campaigns was not measured simply by overall levels of traffic incidents, but by changes in knowledge, awareness, attitudes, behavioural intention, and behaviour. Elliot concluded that these road safety campaigns

resulted in an average improvement of 7.5% in the individual measured outcome variable. However, there was a marked difference in those studies assessing crash data compared to levels of awareness. Studies utilising crash data rather than ‘awareness’ data found much lower levels of success in terms of a reduction in crashes. This suggests that road safety campaigns have varying levels of impact upon differing outcome variables; improved awareness or changes to attitudes do not always result in behavioural change and therefore benefit road safety.

These findings contrast to the aforementioned drink driving campaigns and educational campaigns provided more generally that do not target any particular social group, have largely utilised a rational and fear-based approach, and focus upon the risk of harm equally as much as (if not more so than) the risk of detection (Think, n.d.b). That analysis that has been conducted of these campaigns has also focused upon recall and attitude change, those variables most likely to show improvements but less closely linked to behaviour on the roads. Consequently, an understanding of the educational campaigns that have been used in this way within the UK is weak and those campaigns do not appear to reflect the evaluative research that is available, despite numerous suggestions that road safety education should have a firm theoretical and/or academically supported basis (Elvik et al., 2009).

Whilst research has criticised the use of fear appeals, suggesting that their use is unnecessary (Lewis et al., 2007b) and unethical (Hastings et al., 2004), campaigns continue to frequently adopt a fear appeal approach. Mixed or positive emotional approaches, that have been commended, are rarely observed within road safety education, despite suggestions that they should be more widely adopted and are likely to have greater success than those other approaches that have been used (Lewis et al., 2007a; Phillips et al., 2011).

In a meta-analytical review of previous research, Elliot (1993) found that when an initial level of knowledge or behavioural compliance reached 40%, positive appeals were

generally more effective than negative based appeals. However, when those levels were below 40%, negative appeals were found to be more effective. Therefore, it remains necessary to consider the different types of information that are to be presented in relation to the behaviours they are targeting in order to provide solid conclusions regarding the usefulness of educational approaches to road safety. For those behaviours such as drink driving, that are associated with a lower frequency of adoption and higher social disapproval, a positive appeal may be more successfully utilised. However, for those offences such as speeding that are deemed largely existent and socially acceptable (Corbett, 2003) or mobile phone use while driving that has been highlighted as complicated in developing a sufficient knowledge base earlier within this thesis, the use of fear may be more useful.

Linked to this, road safety education is often presented as a general depiction of the consequences of a given action without a targeted social group or even sometimes a single behaviour of focus. Phillips et al. (2011) concluded that to be most successful, road safety education should have a specific target audience that allows the information presented to have greater relevance and relatability to that audience. Although some educational campaigns and classroom-based education have been targeted at a particular audience such as young people (Stradling et al., 2005; Angle et al., 2009b), most campaigns do not have any single target audience. Without this, individuals will have a greater likelihood of adopting the belief that 'it won't happen to me', or that the negative consequences can be avoided (McKenna, 1993). Tackling this optimism bias is likely a necessary aspect of road safety education effectiveness. This has the potential to be manipulated more successfully with education used as a specific deterrent.

#### **5.4 Education as specific deterrent**

For drivers specifically, however, education has been used in a somewhat different manner, combining its use with enforcement strategies in an attempt to have a greater impact upon

road safety (WHO, 2011). In response to The Road Traffic Law Review, which suggested an enhanced use of road safety education (North, 1988), in 1991 Devon and Cornwall Police and Devon County Council developed and introduced an educational course to be used as an alternative to prosecution for the offence of ‘careless and inconsiderate driving’ (Burgess & Webley, 1999). Behaviours such as sudden braking, poor lane discipline and tailgating previously responded to simply with a warning may now be responded to with an offer of remedial driver training (DfT, 2013a). After years of reshaping and development, this course became what was known as the National Driver Improvement Scheme (NDIS), or more recently, the National Driver Alertness Course (NDAC).

The use of education in this way was credited with somewhat enhancing public satisfaction with attempts to improve road safety. Drivers that had previously felt ‘targeted’ by law enforcement agencies as a result of their wealth providing a higher likelihood of paid fines and successful enforcement (Plowden, 1971: 215), recognised that the use of education allowed for a perception of consideration for *safety* rather than simply revenue collection (Taylor, 1999: 129). It also proved a satisfying response to “increasing public dissatisfaction with the prosecution of motorists who were close to the speed limit” (Ipsos Mori et al., 2018: 7), for example. The non-motorist public remained satisfied that attempts were being made to improve the safety of pedestrians and other road users (Laybourn & Taylor, 2015). Road safety campaign groups accepted the use of education as an attempt to improve driver safety through attitudinal and behavioural change (RoSPA, 2015b). Governmental departments were therefore satisfied by the satisfaction of so many public groups at the same time (O’Connell, 1998). Subsequently, education as an alternative to prosecution developed nationwide over the following decade<sup>23</sup>.

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<sup>23</sup> Public satisfaction with the use of education has since changed, particularly for offences that have been deemed warranting ‘harsher’ penalties, such as mobile phone use while driving (AA, 2014).

Nationally offered courses have been provided by the National Driver Offender Retraining Scheme (NDORS). Used as an educational alternative to prosecution for a number of traffic offences, there are seven national driver awareness courses that drivers may be offered as an alternative to prosecution for a variety of offences (NDORS, n.d). The National Speed Awareness Course (NSAC), one of those provided within the NDORS, is the most highly attended of the seven courses, with over 6.6 million drivers having attended the course between 2010 and 2016 (Ipsos Mori et al., 2018). It is a four-hour long classroom-based course consisting of a presentation of information regarding the offence of speeding, accompanied with group discussion. The information presented takes a rational approach as it highlights the offence of speeding and how it can be avoided in the future, with the information provided by trained presenters (TTC, n.d). It also offers some fear-based content as images and discussion of real-life incidents that have occurred are provided, although this is not a primary element of the course.

A number of evaluations of NSAC have been conducted, with the most recent of these concluding that those attending a NSAC were 2% less likely to be caught reoffending in the six months following the course in comparison to those who received a fixed penalty notice (FPN) (Ipsos Mori et al., 2018). The course was found to be most beneficial, in terms of reoffending rates, for more experienced drivers and less successful for drivers with more penalty points on their driving licence at the time of being offered a NSAC.

In an evaluation of another course, offered for careless or inconsiderate driving offences, with a similarly rational approach to education, Conner and Lai (2005) found that driver attitudes and behaviour were often both improved after attendance at a National Driver Awareness Course (NDAC). However, the improvements to attitudes and behaviour were not always statistically significantly different from a control group who did not attend the

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course due to unavailability in their geographical area. With a higher score suggesting a more negative attitude, attitudes towards speeding<sup>24</sup> for the NDAC group were at a mean rating of 5.1 at pre-course, 5.8 at post-course, 5.8 at six months, and 5.6 at 12 months, showing improvements at post-course that were maintained at six months but reduced slightly after 12 months. In other words, attitudes increased in negativity towards offending behaviours, as was expected, immediately and six months after the course, but this was not maintained at 12 months. These ratings were not dissimilar from those of the control group which were 5 at pre-course, 5.4 at post-course<sup>25</sup>, 5 at six months, and 5.5 at 12 months. Those attending the NDAC also experienced fewer accidents than the control group within the six months following course attendance but this was not maintained at the 12-month stage of data collection. These differences do show a slight benefit of NDAC immediately after the course and up to six months later, but no significant benefit after that, questioning the long-term benefits of the 'rational-education' course.

Generally, in relation to education used as an alternative to prosecution, notions of celerity may be undermined as the provision of education in this way is not a swift process, but is likely experienced a number of weeks after detection of an offence. In this way, education *delays* the 'real' punishment or consequences of offending behaviour in its nature as an alternative to prosecution that is offered only at given times and on particular dates that an individual must wait for. Furthermore, the severity of that punishment has been questioned, with education used as an alternative to prosecution having been described as ineffectively deterring the risky action (DfT, 2016a). These combined may have a negative impact upon the overall success of education used this way, and indeed the severity of punishment has impacted upon the use of education for offences such as using a mobile phone while driving, as will now be discussed.

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<sup>24</sup> Speeding attitudes were understood through a range of questions enquiring into happiness with strict enforcement, acceptability of speeding, frequency of speeding, knowledge of speeding as causing accidents and necessity of speeding.

<sup>25</sup> Those participants in the control group did not experience a course but were questioned at the same point in time as those experiencing the course.

## **5.5 Education for the offence of using a mobile phone while driving**

Since the use of a handheld mobile phone became a road traffic offence in 2003, there have been a number of educational methods adopted in an attempt to reduce its prevalence. However, due to its recency as an offence, there have been fewer forms of education made available, as well as less evaluative and academic work.

In terms of general deterrence, a number of national campaigns have been provided throughout the UK targeting the offence of using a handheld mobile phone while driving. These campaigns have been presented in an attempt to increase awareness of the associated legislation and the dangers of mobile phone use while driving (Angle et al., 2009a). The primary style adopted has been that of a fear appeal (see below), although one of the most recent campaigns has adopted a largely rational approach, identifying an alternative form of action in a statement to ‘make the glove compartment the phone compartment’ (Think!, n.d.c: 1).

The first national mobile phone campaign was introduced in December 2005, two years after the use of a mobile phone while driving became an offence. This campaign consisted primarily of a weeklong cinema advertisement calling for drivers to ‘switch off before you drive off’, alongside radio and poster adverts with the same message (Think!, 2006). It depicted a mobile phone with the text options on the mobile phone reading ‘switch off, lose control, write off car, kill girlfriend’ (Think!, 2006), urging people to choose the first option, as echoed by the tagline. This campaign presented the consequences of the offence through a primarily rational approach, rather than the fear-based depictions of death and serious injury that are often observed within road safety campaigns.

An additional notable campaign was presented between January and March 2007, coinciding with changes in legislation that raised the penalty fine from £30 to £60 and

included the addition of three penalty points to the punishment of the offence (Angle et al., 2009a). The campaign aimed to highlight these changes in legislation but also extended a previous fear-based television advertisement entitled 'split screen' in which an emotional and hard-hitting video presented a sudden collision and death that resulted from mobile phone use while driving, whereby the conversation being held was between a husband and wife, highlighting the nature in which a caller can be implicated in the death of a driver. This was followed by the launch of an online 'driving challenge' game in 2008 that requires individuals to be observant of pedestrians whilst responding to questions being asked by somebody on a mobile phone, highlighting the difficulties of multitasking in this way (Think!, n.d). This game acted as a novel rational approach to road safety education, allowing individuals to recognise the impacts upon skill that the action can have, learning from physical involvement with the distracting action rather than simply second-hand information.

Another campaign took place in May 2009 using the same 'split screen' television advertisement introduced in 2007. Posters were also developed, targeted at young people, showing a partial image of the road and a partial image of a mobile phone, with the tag line 'you can't concentrate on the road and your mobile phone'. A radio advertisement was also used in this period to highlight the dangers of texting while driving, with a young male driver spelling out the words 'texting when driving can cause', followed by the sounds of a crash (Think!, n.d.a). This is a further fear-based approach to education, with the aim of evoking fear in the audience that these serious consequences can result from the behaviour.

The British Market Research Bureau (BMRB) has conducted a number of evaluations on behalf of the DfT into the effects of the Think! campaigns. In 2006 they conducted their first piece of evaluative research on the mobile phone campaigns, which was compared with findings from surveys undertaken annually until a final document was produced in 2012 (Angle et al., 2012). In relation to recollection of publicity regarding mobile phone use while driving, in 2006, only 18% of over 2,000 participants recalled hearing or seeing



a cinema, radio or poster advertisement, the three methods that had been adopted within the 2005 campaign. There was a great increase in the number of participants who recalled seeing something on television relating to the offence of using a mobile phone while driving between 2006 and 2007, from 29% to 51% of participants respectively. This level did not change considerably between 2007 and 2009 (Angle et al., 2009a).

There were significant increases between 2007 and 2008 in the number of participants agreeing that the Think! campaign ‘sticks in my mind’ and made them ‘think twice about using a mobile phone whilst driving’. However, the number of participants agreeing with these statements decreased greatly between 2008 and 2009. When asked their thoughts or feelings about the advertisement, in 2008 10% said that it was ‘hard-hitting, made an impact or hit home’, dropping to just 4% in 2009. Between 2006 and 2009 there was little variation in attitudes towards the act of using a mobile phone while driving, although they largely remained against the behaviour.

These findings do suggest that using the same television advert over a number of years may cause some reduction in the impact and possibly even effectiveness of that advertisement. Changes within mobile phone devices and their capabilities may also contribute to this, as mobile phones have increasingly become attractive in their use (Cheever et al., 2014) and this attraction has likely influenced attitudes towards that use. Whilst mobile phones have developed significantly, the same educational campaigns have been used, failing to account for those changes and the added attraction that must be negated or ignored by drivers. In addition to this, campaigns become outdated in terms of the physical capabilities of a mobile phone, the way that the mobile phone is being used as well as the vehicle capabilities and model.

An assessment of behaviour, as well as attitudes, would have proven additionally useful in understanding the success of these campaigns but has not been provided. Whilst it is interesting to acknowledge rates of recall, they tell us very little about the success of road

safety campaigns in terms of likely road safety improvements. This considerably limits the conclusions that can be drawn regarding the evaluation and, therefore, the success of the Think! mobile phone campaigns. The findings of the research are additionally difficult to interpret due to the inability to separate the impacts of the campaigns from other strategies used to tackle the offence. Whilst the research conducted in 2007 took place shortly after legislative changes when the penalty increased to a £60 fine and 3 penalty points, the research conducted in 2005 took place shortly before legislative changes and before focused campaign activity had taken place, limiting the comparability of their findings.

For a period of time, education was also provided as an alternative to prosecution for the offence of using a handheld mobile phone while driving, both nationally and locally (Hoggarth, 2009; NDORS, n.d). The ‘What’s Driving Us?’ course offered as part of the national scheme of offender education was offered to drivers caught committing the offence of using a mobile phone while driving, amongst various other offences such as contravening a red light (TTC, n.d). It continues to be used, but infrequently for the offence of using a mobile phone while driving – the reasons for which are discussed below. It is a classroom-based course lasting for approximately four hours and focuses on the theory of driving (Brake, n.d). Little else is known about this course from a public and academic perspective as no evaluative research has been conducted. In addition to this nationally offered course, ‘Crash Course’ acted as a local educational alternative to prosecution for the offence of using a mobile phone while driving in the geographical area of Staffordshire. Again, however, little is known about the success of the course as no academic or evaluative research has been conducted considering its use as an educational alternative to prosecution. Consequently, there is no known research considering educational alternatives to prosecution, combining the use of enforcement and education, focused specifically on mobile phone use by drivers for either this local course or the wider nationally offered courses.

Despite this lack of research and evidence to either support or reject the use of education in this way, a previous support for the use of education as an alternative to prosecution for this offence has more recently been retracted. With an increase in the penalties for the offence of using a mobile phone while driving, the Department for Transport advised that educational alternatives to prosecution were not offered for the offence and that individuals should instead receive the higher penalty of six points and a £200 fine (DfT, 2016a). This retraction has not been based upon effectiveness of such education, but “in order to provide a strong deterrent” (DfT, 2016b: 20), with educational alternatives to prosecution being described as “insufficient or inappropriate to the seriousness of the offence” (DfT, 2016b: 20). Public perceptions concerning the severity of the offence were not deemed to match the severity of the punishment where education could be offered as an alternative to prosecution (Direct Line and Brake, 2013), likely influencing the decision to revoke the use of education in that way. Still, it remains important to understand the success of education used in response to the offence of mobile phone use while driving for many reasons, as the following chapter will explore.

## **5.6 Summary**

Education has been used in many ways as a road safety strategy, offered to both those who may not have committed an offence and specifically in response to offending behaviour. As well as this variation in the types of education that have been used, the form of education adopted has also greatly differed between those educational provisions. Three of those most frequently utilised and researched are ‘fear appeals’, ‘rational approaches’, and ‘emotional appeals’. Whilst the use of fear is widespread within campaign education, there is not a significant amount of support for such an approach that deliberately intends to elicit fear within its audience (Haggerty et al., 2004). Rational approaches have more frequently been observed within education used as an alternative to prosecution, although their effectiveness can be questioned through the longevity of that success and a lack of awareness of how such education is used when removed from that educational context.

It is not simple to understand those elements of education that are most effective or those that appear to have the greatest success in improving road safety as many contradictory findings have been presented, making conclusion regarding the success of road safety education complex. Longitudinal analyses have also questioned the ability of education to provide long-term benefits (Conner & Lai, 2005).

Less is known about the forms of education that have been offered in response to the offence of using a handheld mobile phone while driving. Whilst a range of educational campaigns have been provided and a decision has recently been made to revoke offers of education as an alternative to prosecution, little research evidence has been used to inform such ideas or to evaluate their effectiveness. The next chapter will assist with this in providing a detailed, exploratory analysis of 'Crash Course' used as both a method of general and specific deterrence.

## **Chapter 6: Combining education and enforcement – the case of Crash Course**

### **6.1 Introduction**

Whilst the previous chapters within this thesis have outlined general strategies that have been used in an attempt to improve road safety, this chapter will provide a more detailed case study exploration of one particular strategy that has been used in this way – ‘Crash Course’. This case study of enforcement combined with education will be used as a lens to understand the wider context of mobile phone use by drivers. The chapter will begin with an explanation of the course itself, in light of the various approaches to education highlighted within the previous chapter.

The results of an exploratory evaluation of Crash Course from a range of questionnaires and interviews conducted with course attendees and course presenters will then be presented. It will present analyses of self-reported attitudes, behaviours and behavioural intention of those individuals who have attended the course over the research period. The perceived risk associated with various driver behaviours will also be discussed in terms of both general and personal beliefs. Although a data were collected regarding a range of offences, a focus upon mobile phone use while driving, both handheld and hands-free, will be presented here.

### **6.2 Background to Crash Course**

As highlighted within the previous chapter, Crash Course is a form of education that has been offered as an alternative to prosecution for offenders<sup>26</sup>, and has also been offered to groups of employees at the request of their employer<sup>27</sup>. Although focused on mobile phone

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<sup>26</sup> Those attending the course as offenders paid a fee to participate. More individuals attended for mobile phone offences than seatbelt offences.

<sup>27</sup> The course is not currently being delivered in either format.

and seatbelt use, other traffic offences such as speeding and drink driving were highlighted throughout the course, as well as dangerous behaviours that are not offences until driver behaviour becomes evidently impacted by them, such as hands-free mobile phone use<sup>28</sup> and conversing with passengers. The size of the audience varied, depending upon the number of drivers caught committing offences within a given time period (for offender groups) and the number asked to attend by their employer (in the case of employee provision). For offenders, Crash Course was presented at two different venues, one in a hotel conference room and another in a lecture theatre at Keele University<sup>29</sup>, and lasted approximately 75 minutes. For employees, the venue was decided on by the employer or those organising the presentation of Crash Course and lasted between 60 and 75 minutes depending upon the needs of the employer group.

The course included a range of images, videos and personal stories of road traffic incidents presented by a number of professionals with experience of dealing with road traffic death, injury or imprisonment. The course began with a warning of the emotional and hard-hitting content of the information to be presented, followed by a series of graphic images presenting the personal consequences of unsafe road user behaviour. Throughout the presentation, images of collisions, injuries and statistical representations of the risk of certain driver behaviours were shown. This was combined with video clips of crash test dummies, a personal story of imprisonment and footage of a real-life extraction from a vehicle. Rational information concerning *how* mass is multiplied in a collision and cognitive distraction occur, for example, was also included. This combination of formats allowed for a mixture of a fear-based, emotional and rational, informative presentation of information.

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<sup>28</sup> Hands-free mobile phone use while driving plays an important role within Crash Course and the wider road safety literature as it has frequently been shown to have as great an impact upon driver distraction as illegal handheld mobile phone use but is not legislated against (Caird et al., 2008; Strayer et al., 2014).

<sup>29</sup> This was in place prior to research involvement.

Alongside these, Crash Course presenters discussed their own personal experiences associated with the offender behaviours being discussed, providing a personal and highly emotional element to the course. These stories were presented by and referred to individuals of varying ages, genders and social backgrounds, with 3-4 presenters from a team of 6 present at each delivery. All had personal experience in dealing with the loss of life resulting from traffic collisions, or themselves had been involved in a collision. No script was followed but the presentation did not vary considerably between deliveries. This type of education was therefore a unique presentation of information that was not offered as part of the nationally offered courses or within campaign education.

Research has been conducted of Crash Course offered as a form of general deterrence to schoolchildren<sup>30</sup>. Hoggarth et al. (2009) conducted focus groups with young people and interviews with various stakeholders and combined that with data from questionnaires completed by young people. From the questionnaire data it was found that knowledge of causes of death or serious injury were considerably superior for those who had attended Crash Course than those who had not. Attitudes towards seatbelt use and drink driving were greatly improved after course attendance. Although the young people were asked about their behaviour within vehicles, the vast majority of participants (81%) were below the UK legal driving age so no actual driver behaviour could be considered. As a result, no offending behavioural analyses could be presented to recognise the extent to which those suggested benefits to attitudes and intention to act safely were translated into action. This limits the conclusions that can be taken from such research.

In addition to this evaluation, Staffordshire Fire and Rescue Service have reported on an implied calculation of the success of Crash Course through an analysis of reoffending rates (Staffordshirefire.gov, n.d.). This media article draws upon general rates of reoffending for those offered and not offered Crash Course as an educational alternative to prosecution as

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<sup>30</sup> This version offered to school children is slightly different in the stories that are told than the version received by offenders and employees.

well as quotes taken from a small internal evaluation conducted by the Crash Course presentation team. The article claims that reoffending rates for those caught committing a traffic offence but not offered Crash Course was at a rate of 3.2%, compared to a rate of 0.25% for those who had been offered the course. This suggests that Crash Course may have had a considerable impact upon rates of reoffending. However, information regarding the methodologies adopted to gain these results is not available, necessitating that interpretation of the results is performed cautiously, and limiting the ability to use such information to guide our knowledge of the success of Crash Course. Consequently, additional research was necessary. Part of this thesis, and indeed the remainder of this chapter, focuses upon an evaluation of Crash Course as an educational tool targeted at road safety for both those who have been identified as offenders and those experiencing the course through employment<sup>31</sup>.

### **6.3 Driver attitudes – the influence of Crash Course**

#### **6.3.1 General crash risk attitudes**

When asked “to what extent do you agree or disagree that each of the following behaviours increases the risk of a driver being involved in a crash?”, both offenders and employees showed initially high rates of agreement for all risky driver behaviours questioned prior to attending Crash Course. High scores for this question indicate that participants recognise the crash risk of those behaviours when considering drivers on the roads generally. Figure 6.1 shows the mean scores of these attitudes in relation to three separate mobile phone behaviours<sup>32</sup>.

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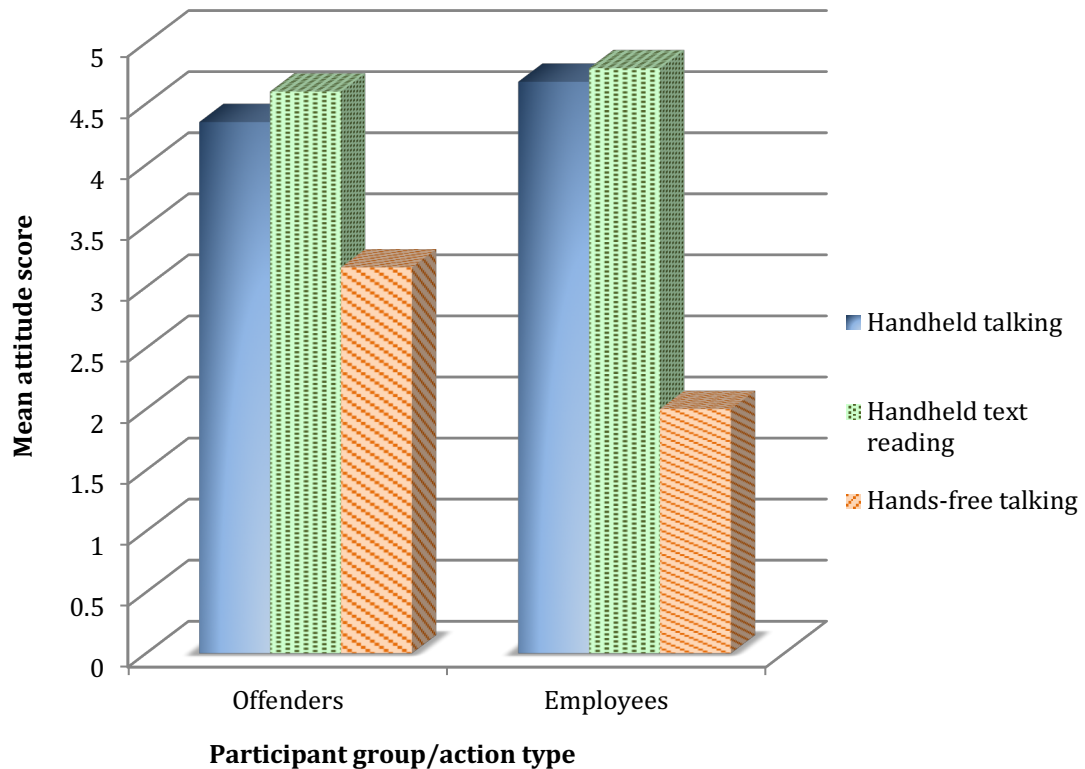
<sup>31</sup> Please see appendices D-I for questionnaires, and appendix L for interview guide.

<sup>32</sup> The mean score represents the scale used within the questionnaire, with a score of 1 being the lowest and indicating that individuals strongly disagreed that the action increased the risk of a driver being involved in a crash, and a score of 5 being the highest and indicating that individuals strongly agreed with the statement.



These mean attitude scores highlight an obvious distinction between perceptions of handheld and hands-free mobile phone use while driving. Scores for attitudes towards talking on a handheld mobile phone while driving and reading a text message while driving were similar, for both groups of participants, and were relatively high. Mean attitude scores towards the risk of hands-free phone use, however, were extremely different to those of handheld mobile phone use at pre-course. This would likely be expected when considering the legal and therefore apparently ‘safer’ nature of the behaviour in its hands-free form, but also suggests that little is known by both groups of drivers, and employees in particular, about the risk associated with hands-free mobile phone use while driving despite an array of research concluding that its use is indeed risky (Treffner & Barrett, 2004; Strayer et al., 2015).

**Figure 6.1:** Bar chart depicting mean scores for offender and employee pre-course perceptions of mobile phone use while driving crash risk.



These differences between perceptions of risk associated with handheld and hands-free forms of mobile phone use while driving were reduced somewhat immediately following attendance at Crash Course. In addition to this, improvements were made to attitudes towards the risk of all three actions immediately following course attendance. Table 6.1 shows percentage changes over the three stages of questionnaire data collection.

**Table 6.1:** Pre, post and follow-up<sup>33</sup> agreement that certain behaviours increased the risk of a driver being involved in a crash<sup>34</sup>.

	Pre - % agreed or strongly agreed (n)	Post - % agreed or strongly agreed (n)	Follow - % agreed or strongly agreed (n)
<b>Offender group</b>			
Reading a text message while driving	89.1% (964)	97.5% (201)	100% (34)
Talking on a handheld mobile phone while driving	80.1% (967)	96.5% (201)	100% (34)
Talking on a hands-free mobile phone while driving	31.5% (960)	77.1% (201)	67.6% (34)
<b>Employee group</b>			
Reading a text message while driving	93.4% (284)	97.4% (120)	94.4% (18)
Talking on a handheld mobile phone while driving	91.9% (284)	97.5% (120)	94.4% (18)
Talking on a hands-free mobile phone while driving	61.8% (283)	93.2% (119)	88.9% (18)

<sup>33</sup> These results must be considered in light of the levels of attrition discussed in Chapter 2.

<sup>34</sup> When asked "to what extent do you agree or disagree that each of the following behaviours increases the risk of a driver being involved in a crash?"

Of offenders, 80.1% of participants agreed or strongly agreed that talking on a handheld mobile phone while driving increases the risk of a driver being involved in a crash prior to attendance at Crash Course. This increased to 96.5% following attendance at Crash Course, suggesting that attendance at the course enhances the perceived risk associated with the behaviour. Only 31.5% of offenders agreed or strongly agreed that using a hands-free mobile phone while driving increases the risk of a driver being involved in a crash prior to attendance at Crash Course. However, considerable changes made to hands-free mobile phone use attitudes following attendance at Crash Course reduced that sizeable gap at post-course, more than doubling to 77.1% of offender participants agreeing with the crash risk of the behaviour.

A paired samples t-test<sup>35</sup> showed that this difference between pre-course ( $M = 4.35$ ,  $SD = .97$ ) and post-course ( $M = 4.77$ ,  $SD = .52$ ) perceptions of risk for talking on a handheld mobile phone while driving was statistically significant for offenders,  $t(112) = -4.70$ ,  $p < .001$ . A similar result was obtained for reading a text message and talking on a hands-free mobile phone. Therefore, Crash Course does appear to have immediately significant benefits to attitudes towards the risk of handheld and hands-free mobile phone use while driving for offenders.

For those attending Crash Course as part of their employment, attitudes prior to course attendance showed a greater understanding of risk than for offenders, as may be expected given their course attendee status as employees (who may or may not have committed an offence) rather than offenders (who have at least committed either a mobile phone or seatbelt offence, resulting in their course attendance). Despite this, attitudes still consistently improved immediately following attendance at Crash Course for this group as they did with offenders. As with those in the offender group, a paired samples t-test showed

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<sup>35</sup> Please see section 2.8 for a discussion of the chosen data analysis techniques. Parametric tests are presented here as the data were normally distributed. Similar results were obtained using non-parametric alternatives.

that the difference between pre-course ( $M = 4.68, SD = .77$ ) and post-course ( $M = 4.85, SD = .62$ ) perceptions of risk for talking on a handheld mobile phone while driving was statistically significant,  $t(97) = -2.10, p < .05$ , for employees. This was also true of hands-free mobile phone talking while driving<sup>36</sup>.

Table 6.1 indicates that the improvements observed immediately following attendance at Crash Course were also largely maintained at the six-month follow-up stage of data collection. This was particularly the case for the offender group, with all participants at the follow-up time phase either agreeing or strongly agreeing that reading a text message and talking on a handheld mobile phone while driving increase the risk of a driver being involved in a crash. Paired samples t-tests, however, showed non-significant differences between pre-course ( $M = 4.48, SD = .80$ ) and follow-up ( $M = 4.77, SD = .25$ ) attitudes towards talking on a handheld phone while driving for offenders,  $t(31) = -1.87, p > .05$ . This was also the case for attitudes towards reading a text message whilst driving<sup>37</sup>. This is likely a result of the small sample size obtained at follow-up, limiting the results and conclusions that can be made.

The results do suggest that those who completed both the pre-course and follow-up stages of data collection *did* recognise the general risk associated with these handheld forms of mobile phone use while driving following Crash Course, but also that the risk was also largely recognised by that group of participants *prior* to course attendance. Firm conclusions are, therefore, difficult to make regarding the level of success that the course had in providing longer-term benefits to risk-based attitudes. The results from employees showed similar, non-significant differences between pre-course and follow-up data for these variables.

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<sup>36</sup>  $t(96) = -8.32, p < .001$  and  $t(97) = -.90, p < .05$ .

<sup>37</sup> Pre-course ( $M = 4.65, SD = .80$ ) and post-course ( $M = 4.94, SD = .25$ ),  $t(31) = -1.96, p > .05$ .

Despite this, attitudes towards hands-free mobile phone use while driving *were* significantly changed within the offender group of participants between pre-course and six-month follow-up. A paired samples t test showed a significant difference between pre-course ( $M = 3.13, SD = .94$ ) and follow-up ( $M = 3.63, SD = .67$ ),  $t(30) = -2.55, p < .05$ , indicating that even six months following attendance at Crash Course, the increases in perceived risk associated with hands-free mobile phone use while driving remained significantly different to the perceived risk associated with the behaviour prior to attending Crash Course. This suggests that Crash Course is able to have some long-term benefit to attitudes towards the general crash risk of drivers for behaviours that are initially perceived as less risky (hands-free mobile phone use), even for those who showed an understanding of the risk of handheld mobile phone while driving prior to course attendance.

Combining these results with those shown in table 6.1, it appears that Crash Course as an educational tool does well to highlight the consequences of hands-free mobile phone use while driving and subsequently change attitudes regarding the behaviour. The combination of rational and fear-based information relating to hands-free mobile phone use within Crash Course appears successful in improving attitudes regarding a behaviour that is not widely reported as being 'risky' (i.e., in law).

An increased awareness of the risks associated with hands-free mobile phone use while driving was also provided within interview discussion of course attendance, as both Debbie and Jean highlighted:

“The gentleman who was in prison because he’d killed a man that was the same age as his son, and I think he was on a hands-free phone wasn’t he? Yes he was, he was on a hands-free phone and he hadn’t seen that the lanes were going to change after a roundabout, and erm, I mean that, oh gosh, that spoke to me so much, it really did.” (Offender Jean)

“I thought using my hands-free kit was pretty safe really and the course made you aware of the fact that you are still taking your attention away from what you are doing, you are still not fully concentrating on the road, you miss road signs and things if you are chatting away while you're driving, even if you are on a hands-free.” (Offender Debbie)

Without the provision of education such as Crash Course, individuals are generally left unaware of the risks associated with hands-free mobile phone use while driving as educational campaigns generally focus upon the illegal behaviours associated with road safety. Used as an educational tool, Crash Course has the ability to highlight those dangers and subsequently influence perceptions of the behaviour that are not being targeted by any other form of road safety strategy. Course attendees described surprise in the information that hands-free mobile phone use, although legal, was not a safe alternative to handheld mobile phone use while driving. Road safety education therefore does have a role to play in increasing awareness and improving attitudes where other strategies fail to do so effectively.

Nonetheless, whilst education has the ability to influence attitudes towards behaviours that are not even illegal but have the potential to lead to severe consequences, a failure to be supported by other road safety strategies likely reduces the longevity of that benefit. Although information was presented throughout Crash Course highlighting the dangers of the behaviour, other forms of information outside of that educational context (particularly the law) suggest that it is not of considerable danger due to its legality. Upon leaving the venue at which Crash Course was presented, those other influences, such as the law, likely begin to increase in importance, as they did before attending Crash Course. When outside of that educational context in which hands-free mobile phone use while driving is described as highly risky to personal safety, the roads context in which individuals find themselves in the weeks, months and years following attendance at Crash Course are less likely to be focused around that education. Rather, they are likely guided by the law, which suggests a

low risk to the action (particularly in terms of penalties), and to the needs of daily life, which increase the attractiveness of mobile phone use while driving (Lyons & Urry, 2005; Cheever et al., 2014). Consequently, the action continues to be perceived as less risky than its handheld alternative.

### **6.3.2 Distinguishing between general risk and personal safety**

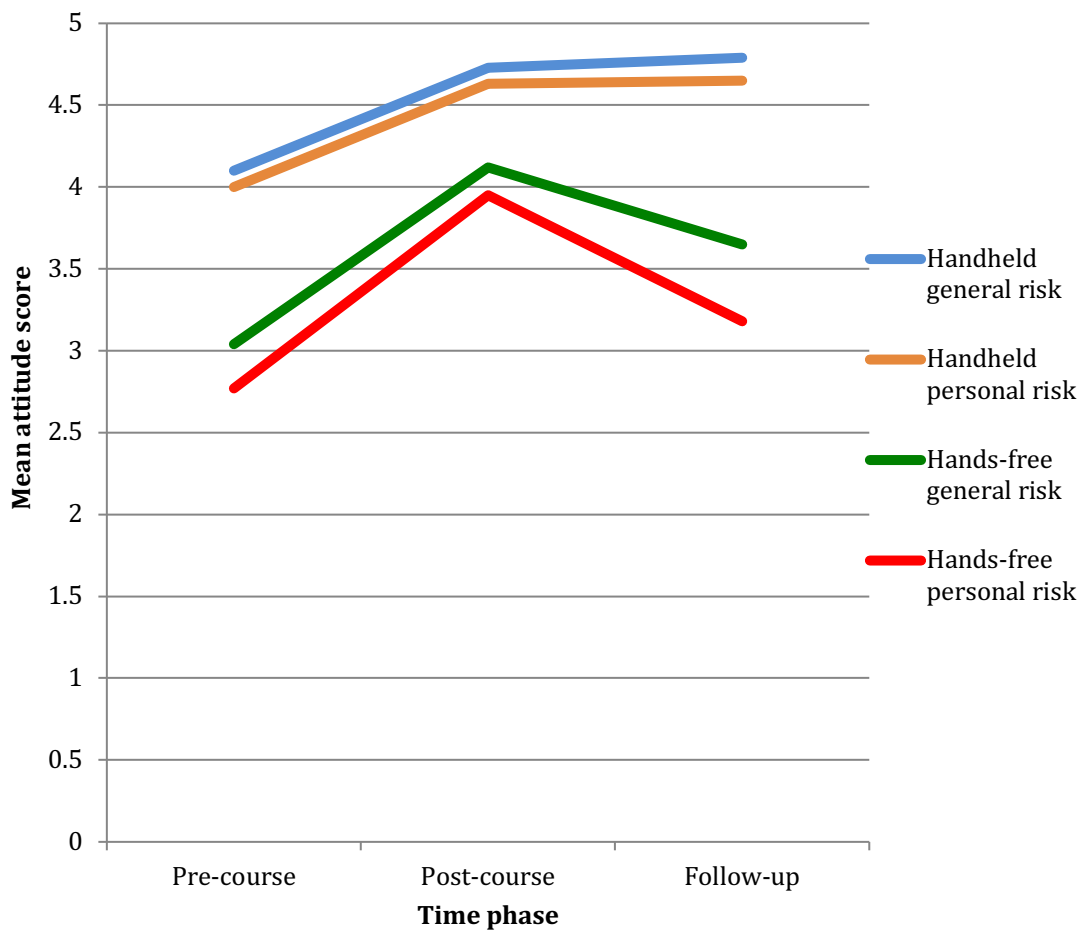
As well as the question previously analysed regarding general crash risk, another question was asked of a range of risky road user behaviours in order to identify any differences between perceived general crash risk and perceived personal safety. In relation to personal safety, participants were asked: “to what extent do you agree with the following statements regarding your driver behaviour?... I would feel safe...” This was followed by a range of actions, such as “talking on a handheld mobile phone while driving”.

As this set of questions asked individuals to consider how safe they would feel, rather than the risk they perceived, lower answers represent a lower perceived safety and higher answers represent a higher perceived safety. This is the opposite to the previous set of questions enquiring into general crash risk where a high score indicated a higher perceived risk. However, for the following analyses the scale was reversed for those questions enquiring into safety in order for additional analyses to be conducted whereby the two scales could be more easily compared. As such, the personal safety items became personal risk items, with a high general risk score having the same value as a high personal risk score – both would indicate that the level of perceived risk was high and perceived safety was low. It is recognised that these scales are not direct opposites but can be usefully compared when representing the same scale direction (1 being a low score and 5 being high).

Figure 6.2 depicts the mean scores for questionnaire items relating to perceived general risk and personal risk at pre-course following this reversal procedure. Within the chart, a

score of 5 now indicates a high perceived level of general risk and a high perceived level of *personal risk* (or a low perceived level of personal safety). This chart highlights a clear difference in risk perceptions between handheld and hands-free mobile phone use while driving, with mean risk scores remaining considerably higher for handheld mobile phone use than hands-free mobile phone use while driving prior to an experience of Crash Course. From the chart it can also be observed that perceived general risk and perceived personal risk are not identical, for both behaviours and both groups of participants. There are differences between these two forms of questioned risk, with those differences highest for hands-free mobile phone use while driving for both offenders and employees.

**Figure 6.2:** Bar chart depicting mean scores for offender and employee pre-course perceptions of general risk and personal risk of handheld and hands-free talking while driving





For offenders, the difference between general and personal risk were significant when considering handheld mobile phone use while driving, with general risk ( $M = 4.10$ ,  $SD = 1.09$ ) perceived as higher than personal risk ( $M = 4.00$ ,  $SD = 1.03$ ),  $t(951) = 2.69$ ,  $p < .01$ . This highlights a significantly higher perception of risk when considering the general driver population than when considering oneself talking on a handheld mobile phone while driving. For employees, this statistic was smaller and a non-significant difference was observed between general risk ( $M = 4.53$ ,  $SD = .95$ ) and personal risk ( $M = 4.45$ ,  $SD = .74$ ),  $t(282) = 1.17$ ,  $p > .05$ . For employees, there was therefore not a significant difference between general risk and personal risk attitudes towards handheld mobile phone use while driving.

There is a greater discrepancy between general and personal risk attitudes for offenders than for employees in terms of talking on a handheld mobile phone while driving. This may have been expected following the nature of course attendance, as those caught offending would likely be expected to have a greater perception of their own safety, potentially contributing somewhat to their offending behaviour initially. This supports previous research which has claimed that individuals perceive themselves as more skillful and less risky than other drivers (Svenson, 1981; Delhomme, 1991), and further suggests that those attitudes regarding risk play some role in decisions to adhere to the law.

As figure 6.2 indicates, the differences between perceived general risk and personal risk were much greater for hands-free mobile phone use while driving than they were for handheld mobile phone use, as supported by t-tests. For offenders, the general risk associated with talking on a handheld mobile phone while driving ( $M = 3.04$ ,  $SD = 1.06$ ) was significantly different to the personal risk associated with the same behaviour ( $M = 2.77$ ,  $SD = 1.16$ ),  $t(952) = 7.40$ ,  $p < .001$ . For employees, a similarly significant difference was observed between general risk ( $M = 3.65$ ,  $SD = .92$ ) and personal safety ( $M = 3.07$ ,  $SD = 1.12$ ),  $t(280) = 8.98$ ,  $p < .001$ . The statistics suggest that individuals perceive the risk

associated with mobile phone use while driving, in particular that of hands-free mobile phone use, as higher than they perceive their own risk of the behaviour.

These findings do suggest that there is some discrepancy between attitudes regarding the self and the general driver population, with drivers perceiving their own actions as safer than those of other drivers. As McKenna (1993) claimed, drivers appear to believe that they are more likely to experience the positive elements associated with a behaviour than they are to experience the negative consequences, or they continue to believe ‘it won’t happen to me’ (McKenna, 1993: 1). Individuals do indeed appear to show an optimism bias in favour of their own behaviour here.

This creates complications for attempts to reduce the prevalence of mobile phone use while driving on the roads where individuals believe that they have the skill or ability to remain safe when performing risky road user behaviours. It provides individuals with the ability to believe that methods to tackle mobile phone use while driving, such as educational campaigns, are targeted at ‘other’ drivers, less capable than themselves and more worthy of police attention or efforts to control behaviour. This will be discussed in more detail in chapter 9, but highlights here the importance of understanding and distinguishing between both general notions of risk in the roads as well as those personal associations with risk.

Throughout the interviews drivers did point out an increased awareness of the risk associated with many driver behaviours, but they did also suggest that this increased awareness actually enhanced their perceptions of the danger of *other* road users rather than a danger in their own behaviour:

“You look around at other road users and you think well if you just take a little bit more time and read a little bit further ahead as to what is happening on the road then you might not have got yourself into that difficulty. It’s all about anticipation and watching out for what other road users are doing and

anticipating what they might do because people will do the most unexpected things.” (Employee John)

An enhanced awareness of the risk associated with both illegal and legal driver behaviours on the roads did continue to provide a focus on the ‘other’ road user. There is a danger that receiving education such as Crash Course in this format does not prevent drivers from believing that it is those less-skilled on the roads that require changes to be made to their behaviour. This supports previous research (such as Harre et al., 2005) that fear-based education is ineffective in tackling self-enhancement bias, or belief that one is a better driver than others. However, as it is more targeted and individualised for these groups of drivers than education provided through television and radio campaigns, for example, it does appear to have some impact upon attitudes towards one’s own driver behaviour also.

Through an explanation of how the behaviour of other drivers can influence one’s own safety, drivers often suggested that their own behaviour would change as a result, as John (above) highlighted in stating the importance of anticipation and observation of other road users to ensure his own safety. The behaviour of other drivers on the road does play a role in the safety of road users, however, it is important to ensure that drivers recognise the risks associated with their own driver behaviour as well as that of others’ in order to encourage the greatest behavioural change.

Referring back to figure 6.2, above, the same quantitative statistics concerning attitudes were explored after course attendance. At post-course, the difference between general risk ( $M = 4.73$ ,  $SD = .66$ ) and personal risk ( $M = 4.63$ ,  $SD = .65$ ) for handheld mobile phone use while driving in offenders was no longer statistically significant,  $t(199) = 1.90$ ,  $p > .05$ . This was maintained at follow-up. Thus, Crash Course appears to have some benefit in reducing the perceived difference between general and personal risk for the action of talking on a handheld mobile phone while driving for offenders.

Nonetheless, hands-free mobile phone use while driving did continue to be perceived significantly differently between general and personal notions of risk, following attendance at Crash Course and six months later. This was true of both offenders and employees. Therefore, individuals continue to perceive themselves as safer, or less at risk, than other road users in terms of hands-free mobile phone use while driving, even following attendance at Crash Course. This suggests that those aforementioned findings in relation to the perceived safety of hands-free mobile phone use while driving are more difficult to tackle than those of handheld use. Perceptions of hands-free mobile phone use indicate that individuals look to the law at least partially as a guide for behaviour, or as a guide to safety. Where they are safe from the law, individuals believe they are safe on the roads. Furthermore, when individuals cannot *see* risk, or the physical distraction associated with mobile phone use, it can more easily be ignored.

Although individuals are exposed to information concerning *personal consequences* of risky road user behaviour within educational courses such as Crash Course, those legal or enforcement *risks of detection* also exist on the roads, and may be perceived as more likely to be experienced in relation to one's own driving (as a 'good driver') than personal consequences. Attempts to tackle attitudes towards one's own risk of using a hands-free mobile phone while driving would therefore likely be more successful with the use of legislation to support them.

#### **6.4 Driver behaviour – the influence of Crash Course**

Although risk-based attitudes are able to provide some understanding of how drivers perceive mobile phone use while driving, and how that may change following an experience of education such as Crash Course, driver behaviour provides an additional form of knowledge, of potentially greater interest. Although attitudes may play some role in informing behaviour, without a change to behaviour itself, the roads would not become safer - attitudes do not always equate to behaviour, as the RAC Report on Motoring (2017)

found that despite mobile phone use being one of drivers' greatest concerns, a considerable proportion of drivers admit to having used a mobile phone while driving.

#### **6.4.1 Handheld mobile phone use behaviour change**

Behaviour was inquired about within the pre-course and follow-up<sup>38</sup> questionnaires as participants were asked to indicate approximately how frequently in the last six months they had performed a range of risky road user behaviours<sup>39</sup>. Figures 6.3 and 6.4 present the percentages of participants admitting to talking on a handheld mobile phone while driving in the six months prior to attendance and the six months following attendance at Crash Course, for offenders and employees respectively.

For offenders, there is an obvious difference between the two time stages. In the six months prior to course attendance, individuals were considerably more likely to use a handheld mobile phone while driving for a verbal conversation. This was somewhat expected due to the nature of their course attendance. However, it is particularly interesting that over half of all participants (66%) admitted to using a mobile phone while driving in this way at least once in the six months prior to Crash Course and that 33% admitted to talking on a handheld mobile phone while driving either occasionally, quite often or all the time. When asked about their behaviour in the last six months at follow-up, no participants admitted to talking on a handheld mobile phone while driving this often, with a much smaller 16% admitting to talking on a handheld phone at any point over the last six months. A paired t-test showed that the difference between pre-course and follow-up was significant<sup>40</sup>.

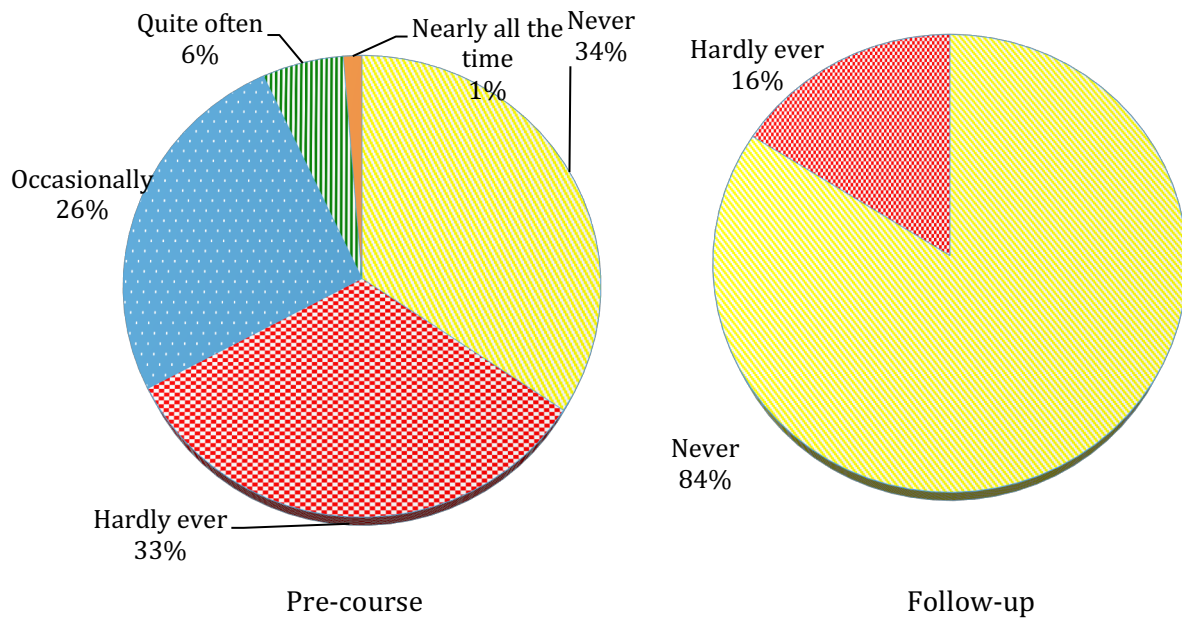
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<sup>38</sup> It was not necessary to question behaviour at post-course due to the minimal time difference between pre-course and post-course.

<sup>39</sup> Please see methodology chapter for a discussion of the reliability of self-reported offending behaviour. These results must also be considered in light of the levels of attrition.

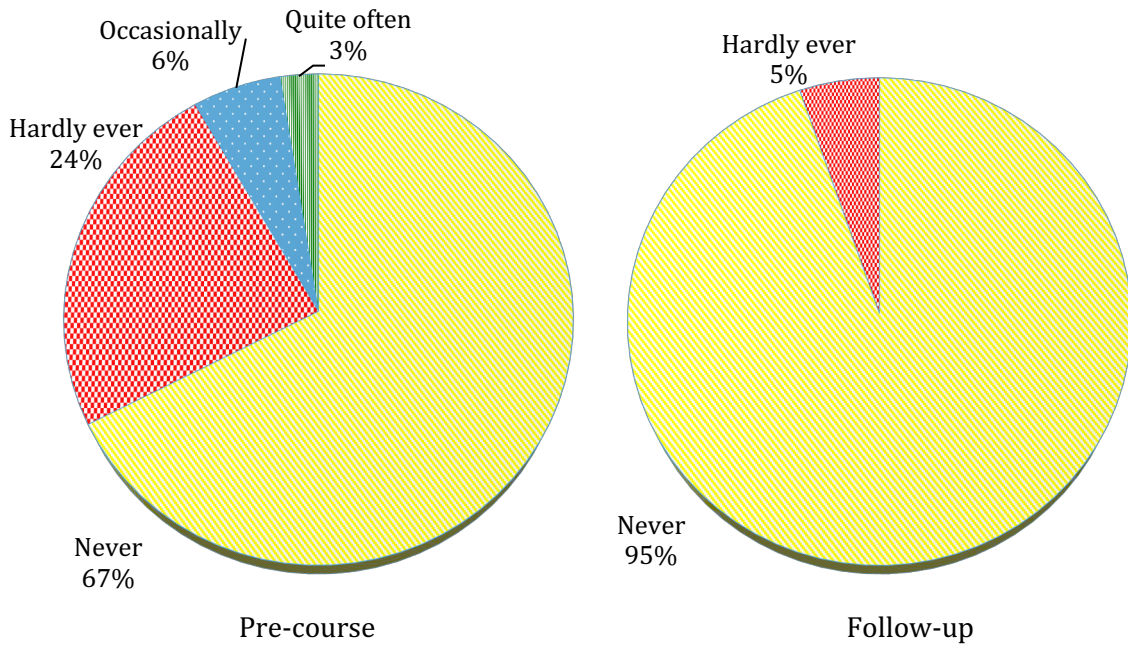
<sup>40</sup> Please see appendix P for this analysis.

**Figure 6.3:** Offender pre-course (n=946) and follow-up (n=31) percentage frequency of individuals admitting to talking on a handheld mobile phone while driving in the last six months



Crash Course, at least in part, appears to be able to significantly influence self-reported driver behaviour in terms of this form of handheld mobile phone use while driving. Given that the course largely targets this behaviour and that these behavioural changes are observed over a six-month time period, the findings suggest considerable success in this form of education for offenders. Education *is* able to act as an effective alternative to prosecution in that it assists in the behavioural change of drivers and encourages legal behaviour.

**Figure 6.4:** Employee pre-course (n=277) and follow-up (n=19) percentage frequency of individuals admitting to talking on a handheld mobile phone while driving in the last six months



A difference between time points can also be observed from figure 6.4 presenting the same statistics for employees. Although a much larger 67% of individuals claimed never to have talked on a handheld mobile phone while driving in the six months prior to attendance at Crash Course, there were still over a quarter of participants who had done so at least once. This is noteworthy given that observations made by the DfT (2015a) showed that only 1.6% of drivers had used a handheld mobile phone while driving in any form<sup>41</sup>. This suggests that offering education such as Crash Course to groups of the general population, or non-offenders, may be useful, as over a quarter of them have committed the offence within the last six months.

<sup>41</sup> Some drivers were observed looking down at a mobile phone, indicating that they were texting or using the phone in some other way than talking.

This employee group showed a lesser frequency in performing the action, however, with no participants stating that they used a handheld mobile phone while driving in this way ‘nearly all the time’. At follow-up, only 5% of participants admitted to talking on a handheld mobile phone whilst driving at any point within the last six months, with all of those indicating that it was not a frequent occurrence. A chi-square test<sup>42</sup> showed that these differences between pre-course and follow-up were significant. Thus, Crash Course appears effective not only in improving the behaviour of offenders but also those who have not necessarily been caught committing an offence that they *have* performed. This is imperative as these individuals are receiving this education without the requirement of police intervention, but continue to benefit from its presentation. It is in this way that education is able to benefit road safety more widely than simply being offered to those identified by police officers as having committed an offence.

Qualitative interview data can also be used to support these statistical conclusions<sup>43</sup>. Individuals frequently identified ways in which their driver behaviour had changed throughout the interviews, describing both handheld and hands-free mobile phone use while driving, as the following quotes show:

“Since Crash Course it is something I think about when I get in the car... There’s been several times that my phone has rang while I’ve been in the car and I haven’t answered it, I haven’t gone to answer it or check it or whatever, so obviously it’s had quite a big impact on me because I would have done that in the past.” (Employee Andy)

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<sup>42</sup> A chi square test was used as the assumptions of a t-test were not met (the standard error was 0).

<sup>43</sup> It is important to note that this is a self-selecting group that have chosen to partake in this research, and therefore any similarities or differences in demographics, attitudes and behaviours cannot be attributed to researcher selection process.



“Since the course one of the first things I do is, I turn my mobile phone off so I can’t be distracted at all by it and I just take the attitude that, if anybody needs to get in touch with me they will just have to leave a message until I have completed my journey. I certainly am driving very much calmer. I am being very much more sensitive to other road users.” (Offender Keith)

Behaviour change described from the course attendees ranged from a heightened awareness whilst driving to complete termination of particular behaviours. As well as simply suggesting that they would not answer a phone call if one were received, interviewees often stated that their phones were placed in areas of the vehicle that they could not be reached, or were turned off, to ensure that the use of their mobile phone within their vehicle was not at all possible. Simply attempting to refrain from looking at or answering a phone call or text message, or even using a device in one of a number of ways possible today, is often not enough to ensure that the behaviour is not performed. Self-imposed removal of the ability to perform the behaviour may be the only way in which that can be ensured, as chapters 7-8 of this thesis will explore in more detail.

#### **6.4.2 Hands-free mobile phone use behaviour change**

Within the interviews, individuals also described the ways in which their hands-free mobile phone use behaviour had changed following the course. The changes relating to this action, however, were evidently different from those of a handheld device. Rather than discussing the ways in which they had refrained from its use, hands-free mobile phone use was described as *reduced* or limited in some way, as Steve described:

“Whereas previous to that course I would answer every [hands-free] phone call that came in, wherever I was, whatever I was doing, whatever kind of road type I was on, whatever road conditions I was in, whereas now,

because obviously the caller display comes up and I can see who is calling me, now I would think twice about whether I would need or want to take the call. So it's a couple of second thought of 'am I comfortable taking this call right now?'" (Employee Steve).

Describing the consequences surrounding hands-free mobile phone use while driving did have significant benefits to attitudes regarding the offence immediately after attending Crash Course. Where hands-free devices were frequently used prior to course attendance, this was described as being reduced considerably within the interviews conducted approximately six weeks following course attendance. This was particularly the case for mobile phone use as a tool for which to 'chat' or when the caller was not integral to the current time in that individual's life.

Those calls deemed 'important', however (often relating to work and family), were perceived to be exceptions to the rule and worth taking when considering (or ignoring) the perceived minor associated risk. The benefit of using a hands-free device was often described through the ability to inform individuals of late arrival, check on family members and identify employer requests of daily work, as will be explored in later chapters. Differentiating these perceived highly useful aspects of mobile phone use from those that have fewer benefits, such as 'chatting' or taking calls from individuals they do not 'need' to talk to, allow it to be adopted only in those circumstances in which the benefits are perceived to outweigh the potential costs.

Similarly, where the refrained use of the device has fair reasoning, such as employer expectation during working hours, the behaviour is less likely to be adopted from a rational perspective, at least partly due to that cost-benefit analysis described as essential within deterrence theory (Simon & Corbett, 1999; Loughran et al., 2016). Hands-free mobile phone use while driving appears to be influenced by an array of factors external to the

educational context in which Crash Course is presented, particularly as its legal nature appears to allow for an additional level of interpretation or individual understanding of the action.

Questionnaire data complemented these quotes. For talking on a hands-free mobile phone while driving, both offenders and employees again showed behavioural changes between the six months prior to course attendance and the six months following course attendance. For offenders at pre-course, 20.3% of participants claimed never to have used a hands-free mobile phone while driving for talking, whilst 42.2% admitted to doing so quite often or nearly all the time. A significant change was observed between pre-course ( $M = 1.79$ ,  $SD = .86$ ) and follow-up ( $M = 1.17$ ,  $SD = .38$ ),  $t(28) = 4.08$ ,  $p < .01$ . This indicates that offenders were significantly less likely to have talked on a hands-free mobile phone while driving in the six months following course attendance than in the six months prior to course attendance.

For employees, this pre-course frequency of 'never' having talked on a hands-free mobile phone while driving was somewhat smaller at 15.1%. At follow-up, this changed considerably however, with 52.6% of participants claiming never to have talked on a hands-free mobile phone while driving in the last six months. Despite this considerable difference between pre-course and follow-up, the difference in self-reported talking on a hands-free mobile phone while driving between pre-course ( $M = 1.82$ ,  $SD = 1.19$ ) and follow-up ( $M = 1.76$ ,  $SD = 1.03$ ), was non-significant for employees,  $t(16) = .67$ ,  $p > .05$ . Although differences were observed, these were non-significant for those who completed both the pre-course and follow-up phases of data collection.

For hands-free mobile phone use while driving, the influence upon road safety is less obvious than for handheld mobile phone use while driving, at least for employees. Employees, as a group of individuals, may be more inclined to use a hands-free mobile phone while driving due to the nature of their work. For this group of individuals, driving

plays a substantial role in their daily work, hence their attendance at Crash Course. The ability to use a mobile phone in any way allows for that considerable proportion of time spent driving on a daily basis to also be used performing other necessary tasks (Lyons & Urry, 2005), although it is only talking that is considered here. For some employees, they may feel inclined to multitask in this way in order to complete work that is expected of them. This is additionally likely in a society that is concerned with the effective use of time and a continued feeling of ‘not having enough time’ (Rosa, 2013: 140). Using a hands-free device would therefore allow for this multitasking to take place and work to be completed, whilst the behaviour is legally allowed. Again, this reinforces the notion that legislation may actually be undermining some educational attempts to improve road safety.

## **6.5 ‘Real life’ education**

### **6.5.1 Personal stories**

Although the Crash Course presentation begins with a warning of the graphic images and statement that what is to be presented has not been made up, course attendees showed surprise and upset at the realisation that the story being told had been personally experienced by the individual describing it, as Debbie and Kevin particularly explained:

“I thought the most impactful moment of the whole thing was when the lady was telling a story about a particular accident and then at the end it come with the, when they knocked on my door, and we realised the story she has been telling had been a personal experience and I thought that was, a lot of people kind of gasped when she did that. That was the most stand out moment, when we realised she wasn't just telling anybody's story, she was telling her own story, that was very powerful really.” (Offender Debbie)

“Crash Course was brilliant and I thought that it really did make you stop and think because you’re looking at real life experiences and people’s lives change for, just someone making a mistake, just through someone not really thinking about their action.” (Offender Kevin)

According to course attendees such as Debbie, above, the personal nature of the stories being presented influenced both the power and the impact of the course and allowed the information being presented to elicit a number of emotional responses. Individuals described a ‘moment of realisation’, or a point during the course that they realised the information being presented was not just a story, but it was a personal experience. This enhanced the notably hard-hitting nature of the course. Although fear-based, a range of emotions were elicited from such a realisation, from shock to sadness. Providing the hard-hitting nature of fear-appeals but eliciting a range of emotions as expected within emotional appeals (Lewis et al., 2007b) allows for a combined approach that contains both power and impact.

The use of personal stories allows individuals to recognise the emotional connection Crash Course presenters had with the information they were presenting, enhancing the authenticity of that information, the likelihood that individuals perceived it as impacting upon ‘normal’ people and could develop their own emotional connection with that information. This is vital in developing an understanding that they themselves could experience the consequences and that they should internalise the information presented as well as use the advice within their own driver behaviour in order to avoid the associated consequences.

As previously highlighted, as drivers often identify themselves as better performing and more safe than other drivers (Delhomme, 1991; McKenna et al., 1991), it is essential that road safety education allows individuals to recognise that their *own* behaviour can have consequences, and also that those consequences can impact upon the lives of others as well

as their own. Providing this within a context of understanding the pain that has been felt by individuals who have been in such situations allows Crash Course to potentially have a greater impact upon attitude and behaviour change than other forms of education identifying the problem, such as television adverts, that can be easily ignored or perceived as targeted at ‘worse’ drivers. John pointed out that Crash Course reduced this illusion of control and optimism bias through the discussion of personal stories.

“It is ignorance to the consequences because as human beings we always think it’s never going to happen to us, and 99 times out of a million, or you know, 99 times out of 100 should I say, it won’t be us, you can get away with it, but when you are spoken to in the way that the people on that Crash Course spoke to us, you suddenly realise that you’re being talked to be somebody who got up that morning and thought ‘it’s not going to happen to me’, and at the end of that day it had happened to them. And I think that was much more sobering and hit home more than anything.” (Employee John)

Presenting this emotional information through personal accounts of pain, loss and imprisonment, from ‘normal’ people, helps individuals recognise that it does not take a reckless offending driver to cause or be victim to those personal consequences, but it can happen to anybody. Again, the ‘real life’ nature of the education provided within Crash Course allows for a more personal connection with that information that differentiates it from other forms of education, such as television campaigns, or even collisions and death that are notified through media and news sources. It allows for a sense of individuality through that personal connection, providing them with the ability to recognise the role that they play in road safety, or potentially in the consequences associated with offending behaviour.

Another factor influencing the individual nature as well as the perceived success of Crash Course appears to have been the local nature of the stories being told and pictures being

presented<sup>44</sup>. Not only did this allow course attendees to appreciate the stories that were being told due to their real-life nature, but it allowed them to recognise where the incident took place and visually picture that road themselves. Mark identified one story in particular that included a video clip and images of an incident that took place near to the Crash Course venue:

“They played some video of a chap who’d got, he was driving a van, he was driving a lorry and he’d had an accident where he’d killed a guy in a van coming in the opposite direction because he’d overtook on a section of a single carriageway that he thought was a dual carriageway, but it, that was a road in town, you know, a mile from where I got caught, and the fact that it was tailored, well not tailored, I guess that is the course they always give for the area, but it was specific, it wasn’t just stock footage of an accident somewhere, it was this road, you know, a couple of miles away, that anybody could recognise.”

(Offender Mark)

“It’s not a story you would imagine. Especially so local, you think someone would be relaying something that had happened in one of the major capitals like London where its busier, not locally, not somewhere you can actually relate to, where you can picture the fire station that the guy works in, you can picture the kind of fire engine that the guy drives, it all becomes so real then...” (Offender

Kevin)

Providing course attendees with information that they could relate to from geographical areas that they spend most of their lives driving in seemed extremely poignant to many interviewees. Mark related this to his own offence, recognising the similarity between his own actions on that road and the impact that another drivers’ similar actions had. This

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<sup>44</sup> For offender groups only due to the various geographical locations of employee Crash Course presentations.

enhances driver acknowledgement that “it could be me”, as it allows individuals to recognise that incidents do happen to ‘normal people’ driving in similar ways, on the same roads as themselves.

The limitation of providing such local information, however, lies in its transferability – those attending Crash Course as part of their employment were unable to engage in the information in this way as it does not necessarily depict images of road local to them. Nonetheless, as the information presented within Crash Course is of such a vast-ranging nature, employees were able to relate to other aspects of the course, allowing some connection with the information being presented, such as the need to have a driving licence for work purposes and the potential of being left unable to provide for their families should they be caught committing offences that lead to the suspension of their driving licence.

Indeed, in comparing Crash Course to another form of speeding education, two course attendees noted differences:

“I had recently done a speed awareness course myself anyway so I thought it might just kind of be the same thing but they definitely came at it from a different angle, from a more emotional angle which was quite effective... the speed awareness one didn't have anywhere near the same sort of emotional impact as the other one [Crash Course]. I mean it did have some kind of videos and stuff but they were kind of, you know, a bit shorter and weren't generally as relational so it's a bit more kind of factual” (Employee Sally)

“I've attended a speeding course before and that is very monotonous and very boring, you sit there and they lecture you ... it's just got stock stuff that they put up, you know, you shouldn't be doing this, you shouldn't be doing that, that's why you can't speed, blah, blah, blah. The Crash Course was done very much done, you know, on personal experiences of people which is very good



and, you know, people tend to relate to that, whereas like a speeding course you feel like, you know, it's a three-hour bollocking I suppose." (Offender Jamie)

Crash Course was discussed as an informative provision of education that could easily be related to, rather than a punishment, or 'telling off' that other forms of education appear to be. There are clear differences between Crash Course and other courses that are available, but the course attendees describe the discussion of real life, personal experiences as easier to relate to and beneficial to the absorption of information. Rather than simply being told how they should, or should not, drive, drivers claim to prefer an approach that provides them with the necessary information to make their own conclusions regarding whether or not the risks they are taking are able to justify the potential consequences.

Questionnaire data regarding individual evaluation of Crash Course further supports this. At post-course, or immediately following attendance at Crash Course, 97% of offenders agreed or strongly agreed that "Crash Course made me think about my behaviour on the roads". This percentage was maintained at follow-up. In addition to this, 95.9% of offender participants agreed that the information provided was very helpful and 97.5% agreed that the use of true, real life stories was effective. For these two statements, the percentage agreement was increased at follow-up. Similar statistics were observed of employees, with 93.2% agreeing that Crash Course made them think about their behaviour and an even greater 97.4% agreeing that the use of true, real life stories was effective.

The combined rational, emotional, fear appeal that is adopted within Crash Course therefore appears to be successful as a form of education. It provides individuals with information relating to the legality of actions and the associated legal consequences, as well as an emotional and hard-hitting understanding of the personal consequences that can, and indeed have, resulted from the use of a mobile phone while driving, amongst a variety of

other actions. There was also, however, some concern regarding the use of fear appeal educational methods in evoking emotion throughout the course.

### **6.5.2 Monitoring emotion**

The emotional nature of the information presented was particularly prevalent in interview discussion of Crash Course, playing a considerable role in discussions of behaviour change and the impact of the course, suggesting its essential role in eliciting both the attitudinal and behavioural change that allowed Crash Course to provide benefits to road safety. However, it was also described as continuing after course completion, producing a level of apprehension in a number of course attendees when leaving the course venue. As a result, whilst most interviewees discussed the highly emotional nature of the course as necessary and beneficial to attitude and behaviour change, some were concerned at being left in such a highly emotional state:

“There were a few times where I just wanted to cry. I felt really, really upset at the impact that you can have on people that you don’t even meet because of something you can do whilst driving. It sort of opened my eyes to make me realise it’s not just people in other cars, they’ve got families to go to, jobs to go to, and a stupid decision I could make could ruin a million lives just for one silly mistake, and it did make me feel really quite sad and upset that I could have done that to somebody.” (Employee Michelle)

“Maybe there is a bit of a conflict between, on the one hand what I valued about it, which was not feeling that I was just a number, not feeling I was just being rubber-stamped, being personalised, and I really relished that and I liked it, but then at the end of it all we were actually just treated as a huge block of an audience with no recognition or awareness that perhaps individually some people might have been struggling, and if I had been one of those, well if I

work with somebody like that, one thing I will make sure of is that they're not going to go off and drive straight away, you know, if somebody is massively distressed at the end of the session we would say 'look, how are you going to get yourself fit enough to drive to get back into whatever, to get back into the car?'" (Offender Lee)

The emotional content of the real-life stories was accompanied by emotional responses to those stories. Providing an understanding of the impact of incidents resulting from offender behaviour from the perspective of various people involved allowed attendees to recognise that it is not just themselves that are put at risk from their offending behaviour and encouraged behaviour change as a result. However, being left in that highly emotional state was also described by a number of course attendees as more than was necessary to change their attitudes and behaviour and potentially putting their safety as drivers at risk when leaving the Crash Course venue.

Previous research has suggested that the elicitation of excessive fear in fear-appeals can reduce the effectiveness of campaign education as it produces a level of tension and anxiety regarding the topic. Rather than avoid the problem behaviour, individuals endeavor to remove those feelings of tension and anxiety and may consequently continue the behaviour in other ways (Moore & Harris, 1996; Algie & Rossiter, 2010). It has been recommended that a period of 'fear relief', or reduction in the level of fear-based information, is provided to allow for that highly emotional situation to be experienced but not have negative impacts upon those experiencing fear-based education, such as that presented within Crash Course (Algie & Rossiter, 2010). A failure to provide such techniques and allow individuals to experience such an emotionally demanding situation does raise ethical concerns for the use of such education.

For Debbie, below, who had discussed a previous experience of being involved in a serious collision, the emotional information presented within Crash Course had an impact past leaving the course venue:

“When I got home I was quite upset because I'm coming up, I've just gone past the 18th anniversary of my accident so I don't think about it very often but I do still get pain where some of my injuries were and there is a permanent legacy but essentially I am able to walk normally and function normally which is something that we weren't sure about so I don't think about it very often and it made me, I found myself for the next couple of days dreaming about being in the car and being cut out, which is something I haven't done for a long time.” (Offender Debbie)

For those attending Crash Course with some experience of the consequences associated with the offences discussed, the information being presented was particularly difficult to receive. As Debbie attended the course at the time of an anniversary of the collision she had been involved in, the emotional, real-life information was even more challenging to manage.

The use of a rationally-based educational provision may have assisted in reducing the consequential impacts of the course upon attendees, although it would not likely have yielded the same rates of success in attitudinal and behavioural change that have been observed of Crash Course as it was being used. Still, the ethical concerns raised by such heavily fear-based information suggest that either a greater combined use of rational information to act as a method of fear relief, or at least emotional support following course attendance, could be provided to alleviate some of that concern<sup>45</sup>.

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<sup>45</sup> A recommendation regarding the use of such fear-based information can be found in the report for Staffordshire Police produced as part of the Crash Course evaluation (Savigar, 2016).

Not only does Crash Course have a largely emotional impact upon course attendees that must be considered in relation to their individual welfare, but those presenting such emotional information may also be impacted by discussion of their personal experiences of such emotional issues.

“It’s completely draining. It can be... highly emotional... and you don’t even realise how draining it is ‘til you’ve finished. So when you stop all of a sudden, it’s like being drained.” (Crash Course presenter Rose)

“Some days to be perfectly honest, there are some days... it can be difficult, because obviously you’re talking about something that’s probably still affecting people within your own family even though it’s maybe ten years on, but there are still, when I say it’s something you actually never ever get over, you learn to live with, but learning to live with it, there are days, there may be an anniversary there might be something that’s happened that, and it can be very raw, so some days you do come into it feeling quite raw.” (Crash Course presenter Carol)

This highlights one of the issues in providing such hard-hitting and personal, emotional information. The presentation requires a particular skill that enables course presenters to communicate the information within the course, even at those highly emotional and difficult times. Unfortunately, this appears to have been accepted as simply one of the aspects of the course that cannot be avoided given its emotional and fear-based approach. It is almost accepted as part of the course that must take place in order for the benefits of the course to be observed.

Although Crash Course appears to be able to influence attitudes and behaviours, in turn potentially improving road safety, all efforts should be ensured to keep individuals safe

from harm, including emotional harm, where any form of education is able to have adverse impacts upon any of those involved with that education. Little attention has previously been afforded to the way in which forms of education have presented emotional information and the impacts that they have upon those in receipt of, as well as presentation of, such emotional information. Consequently, information utilising a fear appeal approach leaves opportunities for criticism concerning the ethicality of their existence, as both Lewis et al. (2007b) and Hastings et al. (2004) propose of fear appeals within road safety. Future research should consider how the use of such information within education such as Crash Course impacts upon all individuals involved in the presentation of such a course.

Although the combined use of fear, emotion and information approaches within road safety education can, and have, been used successfully, these limitations must be considered in similar future, and current, approaches. The elements of fear, emotion and information do appear to combine well within Crash Course; the personal, emotional stories discussed by presenters are particularly beneficial to attitude and behavioural change. Used as an educational tool for both the means of general and specific deterrence, Crash Course is a relatively successful form of information provision. The use of a largely fear-based form of education appears to be much more successful than previous research has suggested and the previous chapter highlighted<sup>46</sup>, at least for this group of individuals. However, it is important that the emotion associated with fear-based approaches is managed cautiously.

## **6.6 Summary**

Existing as a combined rational, emotional and fear-based approach to road safety, Crash Course is a presentation offered to both offenders and employees in an attempt to improve both attitudes and behaviours relating to road safety. Both general crash risk and personal crash risk attitudes held by offenders were influenced by an attendance at Crash Course,

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<sup>46</sup> Although sample issues must be taken into consideration.

with individuals showing a greater understanding of the risk associated with mobile phone use while driving following attendance at the course. This was supported by interview data whereby course attendees highlighted a change to their understanding of the dangers of hands-free mobile phone use while driving as a result of the information provided within Crash Course. Although attitudes held by employees showed greater negativity towards mobile phone use while driving, or a greater understanding of the associated risk, prior to attending Crash Course, significant changes were still observed in perceptions of risk for this group. Attendance at Crash Course was also shown to reduce an observed difference between notions of risk for oneself and risk in others, however, that reduction was not maintained six months following attendance at Crash Course.

Alongside these changes to driver attitudes, changes to self-reported driver behaviour were also observed. Both offenders and employees showed considerable improvements to their mobile phone use while driving behaviour in the six months following course attendance compared to the six months prior to course attendance. Qualitative data supported this as course attendees gave personal accounts of their own behaviour change and explained how Crash Course was the reason for that change. Individuals did admit to reducing their hands-free mobile phone use, but also suggested that this was not fully ceased.

The 'real life' nature of the information provided within Crash Course was defined as one of the most poignant and meaningful elements of the course. It allowed individuals to develop a personal understanding of the information being presented and created an emotional link to that information. For offenders, that the information presented was of local and relatable areas was highly emotive and provided the information with an even greater personal touch. This reduced the likelihood that the information could be ignored or simply perceived as irrelevant to oneself. Indeed, individuals compared the emotional and 'real life' nature of the course to other forms of education in a way that enhanced their evaluative opinions of the course. Although concerns can be raised regarding the highly emotional and hard-hitting nature of the approach to education observed within Crash

Course, its adoption of a combined rational, emotional and fear-based approach does appear at least partially successful in improving driver attitudes and behaviours.



## Conclusion to part two

A considerable number of road safety strategies exist as an attempt to enhance the safety of road users, with mobile phone use while driving being subject to a number of these. Following the introduction of legislation prohibiting the behaviour in December 2003, both enforcement and educational strategies have been adopted in an attempt to reduce the prevalence of the behaviour. Exploratory analysis of those strategies that have been adopted, however, raises a number of concerns for the success associated with their use, as presented throughout part two of this thesis.

Legislation does not detail enough information regarding the offence of using a mobile phone while driving in relation to the capabilities of mobile phones today. Whilst mobile phone technologies have advanced, the legislation prohibiting their use within vehicles has not, reducing the ability for such legislation to successfully account for a range of behaviours that can now be performed on a mobile phone while driving. In addition to this, legislation continues to allow its use in a hands-free form, despite research highlighting the risk associated with the behaviour (Treffner & Barrett, 2004; Strayer et al., 2014). This further complicates an understanding of those actions that *should* and *should not* be performed in an attempt to remain both safe *and* legal on the roads.

Recent reductions to police funding and cuts to roads policing officer numbers also highlight concerns for the likelihood that offences will be detected and offenders prosecuted (House of Commons, 2016a; Johnston & Politowski, 2016). With a low perceived level of detection, the deterrent influence of penalties that have been utilised is unlikely to be sufficient. In fact, their use *does* appear to be largely ineffective in deterring the use of a mobile phone while driving, as a large number of individuals continue to be observed committing the offence (DfT, 2015a), and even more admit to having performed the action (RAC, 2017b). Although the introduction and/or increase in severity of fines and penalty points has been followed by a reduction in observed offending, that benefit is short-

term and as a result, little change has been experienced since the introduction of legislation (DfT, 2015a).

In addition to these enforcement strategies, educational attempts to reduce mobile phone use while driving and improve road user safety more generally have been observed. Used as an attempt to highlight the consequences associated with the behaviour to the general population, education has been presented in the form of campaigns through various forms of media. The use of education in this way is generally associated with a fear-based approach to the presentation of information, highlighting the personal consequences of death and serious injury associated with offending behaviour in an attempt to encourage individuals to refrain from performing the behaviour through a fear of those consequences (Dillard, 1994). Education has also been used more specifically in response to offending behaviour, as an alternative to prosecution. National courses are offered in response to a range of offences and have frequently adopted a rational approach, highlighting a skill and/or information deficit likely associated with offending behaviour (ACPO, 2011).

The use of education as a method of deterrence for the offence of using a mobile phone while driving has not proven overly successful, although conclusions are limited with little research having explored the benefits of such education to driver behaviour (rather than driver attitudes). As a road safety strategy more generally, results regarding the benefits of education are inconclusive, but appear overwhelmingly short-lived and of greater benefit to driver attitudes than actual behaviour (Phillips et al., 2011). One particular form of education that has been used in response to the offence of using a mobile phone while driving – Crash Course – has been found to be relatively successful in improving both driver attitudes and behaviour. This is the case for the educational course offered to those offered the course as part of their employment as well as for those attending the course as an alternative to prosecution.

Attitudes and behaviours relating to the use of a hands-free device whilst driving considerably improved following attendance at the course, although those benefits were not well maintained. The lack of longer-term benefits suggests that when removed from the educational context, a range of other factors continue to influence attitudes and behaviour, such as the law and physical presence of distraction amongst many others. It is essential that a deeper understanding of the issues highlighted throughout the preceding chapters is provided in combination with that of those additional external influential factors to explore this further. A wider understanding of the social, cultural, political, economic and legal context in which these behaviours are adopted and road safety education is used as one of a number of methods of reducing death and injury is necessary to expand upon the knowledge developed within part two of this thesis.

### **Part three - Mobile phone use while driving in postmodernity**

The third and final major part of this thesis will explore the issues and conclusions drawn from the previous chapters in a wider social and cultural context. The ways in which mobile phones are used whilst driving and a number of reasons behind those behavioural choices will be explored with reference to the nature of contemporary society. This exploratory analysis will allow for a more meaningful understanding of the issues presented throughout this thesis by combining both novel data collected as part of this thesis with previous research and theorisation. The chapters in this section should be considered in pairs, with the first chapter describing the theoretical background pertaining to a particular issue or area of interest and the second using novel data collected as part of this thesis to explore these concepts and ideas.

The first section of this part of the thesis will focus upon the social and cultural context in which mobile phone use while driving may take place. It considers the importance of time and speed through the concept of ‘acceleration’ (Rosa, 2003; 2013), relating that to the reasons *for* mobile phone use and difficulties in adhering to requests to simply cease its use. The uncertainty surrounding daily life will be discussed as having an impact upon mobile phone use, with that use continuing into the roads context. In addition to this, the technological development associated with mobile phones will be critically analysed in relation to the law concerning mobile phone use while driving and individual understanding of that law.

Following this, the use of a mobile phone while driving will be situated within a framework of ‘risk’ (Beck, 1992). Considered in various ways by different people, risk as a sociological concept will be discussed, as well as how individuals respond to a definition of mobile phone use while driving as a risky action. This will be considered amongst an acknowledgement of the difficulties in understanding the risk associated with mobile phone use while driving, particularly where a range of ‘experts’ claim to have the *right* answer or

solution to the problem. It is not simple to define, understand and behave according to a notion of risk that changes rapidly with the development of a technology such as the mobile phone.

Finally, attempts that have been made to police mobile phone use while driving will be discussed in relation to notions of fairness and 'procedural justice' (Tyler, 1988; 2004). Perceptions of the police and police treatment of the public have been described as having the potential to influence offending behaviour (Sunshine & Tyler, 2003). The ways in which mobile phone use while driving has been policed and the responses that have been afforded to the behaviour will be analysed with reference to this.

## **Chapter 7: The social and cultural context of acceleration and uncertainty**

### **7.1 Introduction**

It is often suggested that many aspects of contemporary life are increasingly fast-paced, experienced at a quicker rate for shorter time periods, and pass by with less time for reflection or enjoyment (Wajcman, 2008; Rosa, 2013). Change within the period of one's life is also characterised by speed and frequency, reducing the level of stability and continuity that some writers have associated with a previous less risky and complex existence (Beck, 1992; Giddens, 1991). This chapter explores how social and cultural aspects of contemporary life enhance the desire, or even necessity, to work, move and live at a faster pace than ever before and attempts that are made to find some form of stability or security within those fast-paced movements and change.

The chapter will begin by considering the literature surrounding speed and acceleration (as sociological concepts) within contemporary social life, including how they influence and are influenced by technological development, changes within social life and perceptions of time. The insecurity and instability that correspond with that will also be discussed, in terms of how changes in technology and social life enhance experiences of insecurity, in turn increasing the potential for anxiety. Those aspects of life that prevent such speed, acceleration and change can also have resulting consequences for security within one's identity, relationships, work and other areas of life.

### **7.2 Technological development and economic productivity**

Describing a postmodern experience of life as existing within a fast-paced society, Rosa writes that “the history of modernity seems to be characterised by a wide-ranging speed-up of all kinds of technological, economic, social and cultural processes and by a picking up of the general pace of life.” (2003: 3). According to Rosa, technological acceleration,

the acceleration of social change and the acceleration of the pace of life combine to create a general understanding of how society has, in many ways, sped up. Following a combination of these, the ‘acceleration society’ represents an era in which social growth outpaces rates of achievable acceleration – we cannot keep up (Rosa, 2013).

The first of the three categories of acceleration discussed by Rosa (2003: 3), technological<sup>47</sup> acceleration, refers to the increasing advancement of knowledge and technological production and its impact upon the ‘speeding up’ of society. This form of acceleration has considerable impacts upon human life, primarily through its impact upon our understanding and experience of time and its relation to the economy. Rosa suggests that we have to work quicker in order to achieve more and earn more, as “saving time is equivalent to making (relative) profit” (Rosa, 2003: 11). This economic motor drives technological acceleration.

According to Rosa, individuals experience greater variation in their working lives in an attempt to increase economic success. This variation is generally interpreted as being associated with flexibility and choice rather than instability and anxiety (Beck, 2000). An excessively competitive nature is developed whereby individuals strive to save time in order to produce more goods and make more money within a capitalist economy. Within employment, it is time that is of value to employers and bought from employees (Rosa, 2013). Those who do not save time, and therefore money, do not win in such a society. Rosa (2013) describes this as the ‘slippery slope’ phenomenon; ‘standing still’ in postmodern society causes individuals to reduce productivity, decrease wealth, out-date appearance and behaviour, and ultimately lose the capitalist race (p. 117).

As working lives change, additional skills must be developed, knowledge must be gained and individuals are expected to ‘keep up’ with the changes surrounding their social

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<sup>47</sup> Referred to as technical acceleration when discussing the techniques used in performing a given activity as well as the technologies that are used, or as technological acceleration when referring solely to those technologies or machines.

existence. “Everyone who does not wish to fall behind, be left on the shelf or lose their professional standing must 'update' their knowledge, their expertise - in short, their practical range of skills.” (Baudrillard, 1998: 100). This requires time, which (because it is finite) must be taken from other areas of life and individuals risk finding themselves *stalling* in the economic environment. This is an alternative to ‘missing out’ on employment prospects, which can have more significant consequences - at that point individuals find themselves *reversing* through the economic environment, no longer able to use time to make money and potentially finding themselves behind those who are able to use time in this way. The desire to maintain possession of economic security increases as the likelihood of that security decreases. Economic development, employment and working lives are therefore increasingly reliant upon, but also endangered by, technological change.

Employment is now largely based upon the present, rarely identifiable by the past or indicative of the future. The rise in temporary and part-time work has resulted in many careers and jobs being experienced by individuals (ONS, 2015). With unemployment a concern for many people, presenting identities within the social and working arena becomes increasingly important – individuals may compete to be the most flexible, responsible, hard-working and ideal candidate for the job and be expected to persistently repeat that as they move between jobs throughout their lives (Beck et al., 1994). Consequently, individuals are recognised and defined by their performance in any given role rather than the role itself (Rosa, 2010: 97). Individuals have to adapt to each of these new environments and experience a struggle in the potential of finding themselves without work as technology removes the need for particular types of work or changes its nature. This is just one aspect of postmodernity that creates an experience of uncertainty, instability and unpredictability within what Giddens has termed the ‘runaway world’ (Giddens, 1999). This change also has implications for other areas of social life, and experiences of social change itself.



### 7.3 Swift social and identity change

Alongside the acceleration of technology, Rosa (2003) points out that society itself is also experiencing a level of acceleration, referred to as the acceleration of social change. Within this form of acceleration, continuous or fast-moving change is experienced within values, beliefs, relationships, employment and even everyday behaviour (p. 7). Change is experienced in all aspects of life, where previously greater continuity and stability would have existed. Moreover, the speed with which that change is experienced has increased, allowing change to progress faster and more frequently.

Giddens (1995) argued that with globalisation has arisen a form of detraditionalisation whereby tradition as it was once experienced has dissolved. Autonomy and choice have replaced single truths and consistency, altering the possibility and presentation of tradition. Without ‘traditional tradition’ and the stable force of understanding it provided individuals are required to inform their own identities in different ways. This unpredictable and ever-changing nature of contemporary life necessitates a level of reflexivity, or “continuous monitoring of action which human beings display and expect others to display.” (Giddens, 1984: 3). As Giddens explains “where tradition lapses, and life-style choice prevails, self-identity has to be created and recreated on a more active basis than before” (2002: 48). As there are many different areas of life and different ways through which one’s identity can be portrayed, identity becomes integral in many different areas. (Goffman, 1959/2010).

As societies now comprise of a multitude of ‘strangers’ that may interact with each other but do not *know* each other (Bauman, 1996: 26), the importance of identity is prevalent in social interaction. Prior knowledge of reputation or understanding of identity cannot be known with so many ‘others’ surrounding us in various social spheres. Every day holds the possibility of a new social environment, surrounded by different strangers, with each meeting being a new meeting and representation of oneself. As a result, individuals have

to continually represent their self or identity, allowing for that sense of malleability and change depending upon the social circumstances in which one finds themselves.

An individual can present their identity through the clothes they wear, the car they own, the place they work, the hobbies they pursue, and the people they socialise with. Self-presentation occurs through what we do, what we wear, where we go, who we go with – all aspects of social being. The choices relating to those aspects of life are consequently intrinsically important to individuals. Wajcman (2015) pointed out that whilst leisure time was often that which defined an individual, work, employment and economical value are now some of the highly valued aspects of identity. It is impossible to avoid situations in which one's identity is presented, observed and even analysed within the social world. Furthermore, this is a repeated process as individuals are required to do so on such a regular basis, rather than being able to rely on any reputation following on from actually *knowing* others. Identity presentation is a continuous process that is expected of individuals on a daily basis (Beck et al., 1994: 80).

The notion of the 'good life' being the 'full life' further encourages individuals to adapt their lives to suit the acceleration society (Rosa, 2003: 13). Alongside this, individuals now experience a 'fear of missing out' or FoMO, whereby anxiety and apprehension are experienced when individuals believe themselves to be absent from positive activities and events that other individuals are experiencing (Przybylski et al., 2013: 1841). The psychological upset caused by a failure to be involved with particular experiences ensures that individuals do strive to do more and miss out on less. However, with the vast number of possibilities that exist in postmodernity, it is impossible to attempt to experience all social activities, with psychological and emotional harm possible as a result.

In a life whereby actions are increasingly informed by one's own decisions and requests to decide upon how to act are continuously being presented, the potential for addiction becomes a highly conceivable problem. For some, anxiety overrides the sense of autonomy

experienced when decisions are made (Giddens, 2002: 46). Those aspects of individual's lives that were once defined by tradition are no longer necessarily provided with such guidance or structure so individuals may turn to other objects or actions in an attempt to retain security. Addiction to exercise, food or even work is plausible within this detraditionalised society in an attempt to regain an element of control and continuity (Beck et al., 1994). The issues regarding addiction to such everyday objects or actions have been widely cited, with obesity being cited as a global issue affecting 600 million people worldwide (WHO, 2017), news stories informing us that excessive gym attendance may be a sign of underlying psychological ill-health (The Telegraph, 2016a) and a vast literature already available considering the issue of 'workaholism' or excessive working propensities (Harpaz & Snir, 2003).

In an attempt to retain an element of control through maintaining those foods, workouts or work as prevalent aspects of life, individuals actually risk losing the control they have as those aspects of life take over and become difficult to resist. According to Reith, addiction refers to a loss of control in terms of power and knowledge whereby individuals experience "a subordination of personal agency to some external or unwilled mechanism" (2004: 286). Control is subverted and is no longer held by individuals. The level of perceived certainty, continuity and productivity allows the attraction of such behaviour to remain and the addiction continues to manifest. This, however, is not long-lasting as change is continually experienced in other aspects of life and even in those to which individuals become addicted. A feeling of personal, emotional and psychological security is difficult to maintain as greater possibilities for experience, existence and portrayal of oneself continue to develop.

#### 7.4 The harried nature of life

The final of the three aspects of acceleration discussed by Rosa is the acceleration of the pace of life. This form of acceleration refers to a *general* perception of time - the nature in which individuals feel under continuous time pressure and are expected to perform an increasing number of actions in various areas of life (Rosa, 2013). In the acceleration society individuals believe that time passes by faster than ever and that they have less time to perform an ever-increasing number of daily tasks (Rosa, 2013). For example, rather than spending the majority of the day working or caring for children and performing household tasks, individuals are often expected to juggle both of these – taking children to a nursery or other carer in order to attend their own place of work before returning home to continue caregiving duties alongside household tasks that are to be completed. Consequently, individuals feel that they are struggling to ‘keep up’ with social life. Multitasking almost becomes a necessity in order to fulfil the requirements of social life (Offer & Schneider, 2010; Carrier et al., 2015).

According to Virilio’s (1977/1986) early work, technology has generated a reduction in the distinction between time and space that allows individuals to appear to exist in many realms of existence (virtually) whilst at the same time *being* nowhere (physically) (Virilio, 2000). Whereas Virilio, and others expanding upon his work, emphasise the link between technology and speed, suggesting that technology continually increases the speed in which we are able to perform tasks and therefore renders space less pivotal to human existence (Virilio, 1977/1986; Harvey, 1999), this chapter will explore the continually intertwining relationship between time and space as a result of developing technology.

It is argued here that technology significantly influences that relationship between space and time - whilst technology *does* often reduce their distinction, as suggested by Virilio and others, technology is also largely *co-existent* with both space and time. They rely upon each other and where technology is unable to allow for the progression of *speed*, other

technological developments are utilised in an attempt to use *time* more effectively. Keeping up, or remaining in motion, is an essential aspect of contemporary life. Rather than simply existing in many realms but being nowhere, as described by Virilio, within this and the following chapter it will be argued that individuals have to avoid being suffocated by the increasing number of social areas and associated identities that they are surrounded by. The existence of social media exemplifies this, allowing for the presentation of multiple identities at any given time of day, without the physical presence of acquaintances necessary.

Further than this, it is also the necessity of *being* in various spaces that is problematic when forces prevent individuals from remaining in motion. Rather than physical space becoming less and less relevant, or individuals supposedly feeling that they are physically *nowhere* but virtually *everywhere*, as argued by Virilio, individuals are expected to *be* everywhere (Rosa, 2013). As well as being expected to 'be everywhere', time is a constant reminder that individuals cannot do that. The possibilities to do more and go further are continually increasing (Massey, 1994), although the time in which we have to do that does not, hence a perceived 'time-space compression' (Harvey, 1999: 284). The distinction between time and space is narrowed as the possibilities for accessing space increase and the time in which it takes to access that space reduces.

The cultural motor accelerant is described by Rosa (2003) as progressing the acceleration of the pace of life; we experience an accelerated pace of life as a result of wanting to do more in the same amount of time that we have always had. Completing a task or experience within half the amount of time or at the same time as another allows for twice as many activities to be performed. However, the continuous need for acceleration and desire to complete additional tasks is never fulfilled. Just as acceleration allows more to be completed in less time, it provides the opportunities for further activities or experiences that extend the list of activities to be performed within a given amount of time.

According to Giddens (1990), individuals may feel a sense of ‘ontological insecurity’, or a lack of emotional and psychological certainty as Giddens defines the term, where uncertainty within life becomes vast and unnerving (p. 92). The uncertainties and anxieties surrounding an incomplete or impossible attempt to conduct all tasks expected within life *do* have the potential to allow for this sense of ontological insecurity. Considered alongside an understanding of an increasingly secular society, individuals are no longer able to simply look to religion for a sense of security as they were once able to and this further enhances the emotional upheaval of postmodern life (Giddens, 1990). It is possible that the desire to *do* more in life, as observed by the harried nature of life reported by Rosa (2013), is in part a result of this secularisation of society – as belief in the afterlife becomes less obvious, individuals feel a desire to do as much as possible whilst they are alive and knowingly able to.

Schwartz argues that the time needed to make so many decisions every single day takes time from the development and maintenance of relationships that are able to provide a true level of happiness and satisfaction (Schwartz, 2004). Choice is time consuming, taking time from those multiple activities and experiences that we choose to participate in. Not only does it take time to make choices, but the amount of choice made available increases the number of experiences we desire to achieve, taking time from other aspects of social life if all choices are to be experienced.

With technology allowing more to be completed in a shorter time period, it may be suggested that time would be of greater abundance in the acceleration society. Despite popular perception and academic suggestion that the development of technologies within industrial society *would* produce a ‘leisure revolution’, this has not been experienced (Wajcman, 2008). Far from this suggested period of increased leisure time, complaints are commonly made concerning the perceived scarcity of time, a feeling of being rushed and experiencing constant time pressures (Southerton, 2003; Jacobs & Gerson, 2004). Furthermore, our self-reported satisfaction of the amount of time we spend on leisurely

activity has reduced (Evans et al., 2015). Despite research showing that the amount of time made available for leisure activities is increasing somewhat (Sayer, 2005; Roberts, 2006), developments in technology have provided increasing numbers of devices to interact with, activities to partake in, places to be and people to communicate with. Individuals do not always know which options will make for the most successful results, as the duration of their lifespan or the period of time in which they are of the most useful to one's needs before additional products, knowledge or devices are developed is unknown. Successful interaction with these technologies reduces the amount of time available to devote to other tasks and activities that were previously afforded that time. This leads to a reduced time for each given task, or at least a perceived reduction in time and increased perception of the harried nature of life (Rosa, 2013).

### **7.5 Acceleration of deceleration**

The three forms of acceleration identified by Rosa (technological, social change and pace of life) bind together to form the acceleration society. According to this, individuals endeavor to develop technologies and scientific thought in order to work more efficiently and earn more money that they can spend on a greater number of leisure activities. These technological developments, however, provide even more possibilities for leisure activities and those things individuals want to do, people they want to see and places they want to be increases still, necessitating that we further develop technologies that allow us to do that. Simultaneously, we experience a contraction of time – the amount of time individuals have for each possible activity decreases as they desire to perform more activities. Thus, individuals experience an 'acceleration cycle' whereby these factors continue to influence each other and the acceleration society manifests and strengthens (Rosa, 2003: 11). However, this cycle does not always progress smoothly.

Contrary to James Gleick's (1999) book title suggesting that we are experiencing "the acceleration of just about everything", not all aspects of life pass by with such speed and

we cannot always keep up with life as it appears to pass us by. Issues of deceleration persist despite time seemingly moving faster and space becoming ostensibly smaller. It is not always quicker to access particular spaces at given times any quicker than it has been for a number of decades (Wajcman, 2015). Traffic jams, road closures, railway faults, airline delays and public transport breakdowns represent a small number of ways that time and space are opposed - these factors all act as a braking force in the acceleration process, failing to allow for the continuation of smooth progression. It is these decelerative forces that create complications for living in an acceleration society.

Forming a mutual relationship of (mostly) accelerative development and progression, technology, space and time influence each other and the technical acceleration evident within the acceleration society. Technological developments in mobility influence our relationship to space, developments in communication influence our relationship to people and developments in production influence our relationship to 'things'. Despite this, forms of deceleration prevent individuals from achieving what they wish (or need) to achieve in order to keep up with these accelerated changes and developments. Some aspects of life cannot be accelerated (yet), such as brain processing. Others decelerate as a result of increasing forms of technology available, such as traffic jams. Others still are intentional forms of deceleration, such as periods of mindfulness or relaxation (Rosa, 2013: 85). These forces of deceleration reduce, in a number of ways, the ability for individuals to progress in an acceleration society.

Political arenas are also unable to keep up with acceleration, with governmental interest in public issues often being provided on a reactive basis in response to issues raised by others, rather than in an attempt to provide solutions to self-identified problems. The amount of time expected to be spent making political decisions increases as the amount of actions that request political attention increases, yet responses are demanded immediately. As political interest seeps into the realm of technology, but still cannot keep up, politics falls even further behind. A greater level of disparity exists as individuals and the choices that they



make changes on a regular basis, creating a level of uncertainty that continues into the political arena. Alongside this difficulty produced by acceleration, it is expected that decisions are made sooner, otherwise they risk being outdated before even being made.

As the political system is unable to accelerate at the necessary pace and effectively form the rules and regulation expected, a disappearance of politics is observed (Rosa, 2010). Those rules and regulations that had previously been used to govern social life and inform our daily behavioural choices are no longer necessarily updated and the most informed information on which to make those choices, as part two of this thesis identified in relation to the use of mobile phones while driving – legislation fails to adequately provide an understanding of what is safe, what is legal and how individuals *should* behave on the roads. Individuals are expected to find information themselves in order to recognise how to regulate their lives, which takes additional time and further progresses the cycle of acceleration (Beck, 1992; Rosa, 2003).

One of the greatest complications with these decelerative forces is their inconsistency, instability and uncertainty. As information regarding how individuals should live changes on a regular basis, individuals remain uncertain of the most successful ways in which to live their lives. For example, news stories described the health benefits of red wine in 2017 (The Telegraph 2017a; 2017b), a year after articles claimed that “red wine is bad for you” (The Telegraph, 2016b: 1). In a similar notion to this confusion and instability in knowledge, it is not possible to anticipate when a traffic jam, collision, breakdown, power cut, electrical fault or other form of deceleration is likely to arise. This is simply one of the many ways in which the technological vibrancy of postmodernity interacts with its uncertain and unstable nature. It is the responses to this deceleration process that will be of particular focus during the following chapter.

## 7.6 Summary

Time has an increasingly interconnected relationship with money, with time being of value to employers, bought from employees and used together with developing technology to increase economic productivity (Rosa, 2010). Although technological development has increased the speed of productivity, the social expectation and normality of greater achievements, quicker developments and faster progression has consequently been increased to match that. Alongside speedier advancements in technology, relationships, work, identities and social groups also change at a quicker pace. Technology assists in that change – it provides new areas of work, renders previous work unnecessary, allows for new forms of communication, provides access to a greater number of people and allows for identities to be presented in various ways. With this, group structures change more frequently. Reflexivity or adaptation to one's environment and social arena is necessary (Bauman, 1996).

Rather than being guided by tradition as it was previously experienced, life is experienced with greater change and progression (Giddens, 1995). With the increasing amount of change in these areas follows a request to make a greater number of decisions on a daily basis and continually being presented with additional forms of choice. This choice appears liberating but can actually be more demanding upon individuals than they are able to withstand. Physiological and psychological consequences result, with the possibility of addiction an increasing likelihood (Giddens, 2002). As a result of these increasing possibilities, individuals strive to experience a greater variety of activities, relationships and environments. This causes a perceived contraction of time as individuals feel that they have less time to complete a greater number of possibilities (Rosa, 2003). Possibilities for deceleration are also experienced, limiting the ways that individuals can actually accelerate in this acceleration society. Multitasking represents one way in which activities may be performed without affording extra time to them, allowing the roads to be an ideal lens through which to explore them further, as the next chapter demonstrates.

## **Chapter 8: Mobile phone use while driving in response to acceleration and uncertainty**

### **8.1 Introduction**

The preceding chapter outlined how both acceleration and uncertainty have come to play a central role in postmodern society, influencing experiences of technological progression and social change within working and personal lives. The use of a mobile phone while driving will be explored within this chapter in relation to that literature of the accelerated and uncertain nature of postmodernity, as a metaphor for the postmodern condition. The mobile phone represents a single object that is subject to much technological development and currently allows for; economic productivity, personal development, knowledge enhancement, the representation of identity, and social interaction in varying ways. Used whilst driving, such progression can be continued alongside the task of driving, with obvious apparent benefits for time-saving and productivity.

This chapter considers how mobile phone use while driving is one possible way in which individuals are able to perform multiple activities at a single time and satisfy various needs in both their working and social lives that are governed by speed, acceleration and insecurity. It provides a discussion of how the ability of mobile phone use while driving to allow for multitasking 'on-the-go' illuminates the attraction of the behaviour, with the proposal of a particular set of 'magnetisms' that invite and incite individuals into using a mobile phone while driving. The importance of time management, employer satisfaction, social conformity, identity malleability and perceived control within various areas of life will be discussed in relation to the act of using a mobile phone while driving.

## 8.2 Acceleration and deceleration on the roads

One of the most obvious influences upon the time-space compression of society is the development and mass production of the automobile. With clear links to notions of speed and acceleration, the ability to travel further and faster increases the geographical possibilities for exploration. With the advancement of vehicular technology, the ease and speed in which one is able to reach those locations *potentially* increases. The mobile phone further adds to this, allowing communication *from* anywhere *to* anywhere, both ubiquitous in nature and presence. Keeping up with changes in working life and relationships is made easier through the ability to navigate between those social arenas at a faster pace. However, the *ability* to move more freely follows the *expectation* that individuals do exactly that. It is no longer simply a *benefit* of the technological developments experienced in contemporary life that one can move quicker, further and easier than ever before, but it is *expected* that individuals take advantage of such possibilities in both their social, working and private lives.

Issues arise when forces of deceleration are imposed upon individuals but these (internally and externally imposed) expectations of moving further, experiencing more and doing more remain. There are several cases in which those decelerative forces may be experienced on the roads environment: in those cases where vehicles are a) prevented from progressing as a result of traffic jams, breakdowns, and collisions, b) where individuals are limited in their pace of acceleration through roads speed limits and following slower drivers, c) where individuals have forces of deceleration imposed upon them through vehicle speed limiters, a limited allowance of fuel requiring frequent stops, an inability to financially afford vehicle usage, or even the loss of licence through offending behaviour and d) where individuals make conscious decisions to decelerate by pulling into laybys or stopping for a break.

Suggestions for deceleration are made whereby individuals are reminded not to drive tired, to stop for breaks and to slow down in particular road conditions, contradicting societal expectations to keep moving, to move faster and to fear the consequences of slowing down. Attempting to keep up with change, working lives and social relations is a tiring process, however, the implications of stopping to rest are potentially perceived as far greater than those of driving tired when every last bit of potential must be used. It is argued throughout this chapter that those forms of deceleration are some of the primary aspects of postmodernity that enhance the desirability to find alternative methods of acceleration. Multitasking represents an action that allows for time spent failing to achieve maximum acceleration to be used more effectively, preventing that deceleration from furthering into 'reversing' and allowing time to be used effectively. The issue of distraction through attempts to multitask whilst driving is particularly evident through the use of a mobile phone while driving; drivers are able to perform the task of driving but also conduct another range of activities including sending messages, updating social media, making appointments, calling family members and setting reminders. There are an increasing number of possibilities for multitasking, and therefore distraction, within a mobile phone.

Clearly, the use of a mobile phone while driving has some attraction; it is an action adopted by a large proportion of drivers on UK roads despite largely negative attitudes towards the behaviour (Direct Line and Brake, 2013; RAC, 2017b). There appears to be something about contemporary life that enhances the desire to use a mobile phone while driving. It is being proposed here that the desirability or magnetism of mobile phone use while driving can be categorised into five principle areas of behavioural attraction; effective time management, employer satisfaction, social conformity, identity malleability, and perceived control.

### 8.3 Effective time management

The mobile phone is one of the most frequently used devices in postmodern society (Andrews et al., 2015), with its multi-functionality allowing for many activities to be performed anywhere and at any time of day. It can be found everywhere in its ubiquitous nature and therefore permeates into all areas of life. Its ability to allow for the management of activities, relationships and work make the use of the device increasingly attractive, particularly when individuals are encouraged to maintain a high level of speed in the acceleration society. As technology develops at a faster pace, social change is experienced more regularly and a general quickening in the pace of life is experienced, a device that allows for some multi-functionality has numerous obvious benefits, ensuring that its use is desirable in various environments, including that of the roads.

This need for speed and general perception of acceleration existing in contemporary society was noted particularly by one of the interviewees who had been caught using a mobile phone while driving but also admitted to previously exceeding the speed limit on many occasions:

“You get into a frame of mind where the ethic is no longer to do things properly, the ethic is to do them as quickly as possible and keep your fingers crossed that it will all work out. And that’s the environment most people work in. And it seems to me they carry that ethic with them when they get in the car.” (Offender Keith)

Speed overtakes appropriateness as a guide to behaviour. Rather than simply acting according to how one perceives that they ought to, they act how they perceive they ought to in an accelerated society concerned with saving time. These perceptions of how one *should* behave are both guided by what is actually expected of them and a felt sense of pressure to act in a given way. Speed plays a key role in these pressures. Whether ‘real’ or

'perceived', the temptation to be guided by time above that of safety or with consideration of the potential consequences of action *is* real.

As acceleration penetrates into increasing areas of social life, it becomes increasingly difficult to prevent it from entering the roads environment, or to reverse that process that has already taken place. With the development of technology, social change and the pace of life all accelerating, the accelerated nature of life becomes difficult to avoid or ignore. It may not be a perceived or real *employment* time pressure but one necessitating that a parent gets home in time to put their child to bed after attending a fitness class following work, and before making one of a variety of potential evening meals, ensuring that their house is presentable to others and spending time with other family members, for example.

In order to keep up or accelerate beyond others in the race of life, individuals are expected to, or feel a pressure to, maintain that acceleration on the roads. The impact of this on offending behaviour was identified by a number of interviewees, both police officers and caught offenders:

“There is a modern day problem unfortunately that people need to get everywhere quick and the roads are so blocked, when they get a chance to put their foot down they do because of the pressure from their work, home life, generally a lot of the time.” (PC Frank)

“I think most offences are, speeding especially, come down to time pressure. I don't think it's actually someone's intention to put their foot down and speed. I don't think there's any thrill to driving your van at 90 miles per hour down the road. I don't think anyone does that as a pleasurable thing. I think they do it because of time constraints that they're trying to meet, deadlines, and trying to get through their working day.” (Offender Kevin)

In support of previous research (such as Lyons & Urry, 2005), interviewees described that time spent driving as 'lost' or 'wasted' on the task of driving. As would likely be expected following this notion of acceleration on the roads, exceeding the speed limit was observed as an obvious way in which individuals were able to attempt to keep up with others and employ that speed expected of them. It allows for an obvious sense of 'speeding up' as the world around us too speeds up. Where social, employment and familial pressures increase, individuals are expected to gain time from elsewhere, otherwise they risk disappointment or perceived failure in an ability to perform those tasks. Driving is one such task that it is acceptable to 'miss out on', or to save time performing, as it has those associations with 'wasted time' (Lyons & Urry, 2005; Wells & Savigar, 2017).

Quantitative analyses of the questionnaire data appear to show a similar importance of multitasking, moving at a faster speed and 'getting things done'. A one-way ANOVA was conducted to explore the difference in means between self-reported offending behaviour<sup>48</sup> and the number of miles driven annually as categorised into four groups ordered from low mileage to high mileage<sup>49</sup>. There was a statistically significant difference in self-reported offending frequency (relative to frequency of driving) for the four mileage groups:  $F(3, 753) = 6.94, p = .00$ . Despite this statistical significance, only a small eta squared effect size of .03 was calculated. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for group 1 ( $M = 8.93, SD = 3.08$ ) was significantly different from group 4 ( $M = 10.26, SD = 2.77$ ). The mean score for group 2 ( $M = 9.41, SD = 3.06$ ) was also significantly different from group 4. High mileage drivers (group 4), or those driving over 15,001 miles per year, had a higher mean self-reported offending rate than those drivers with a self-reported annual mileage below 10,000 miles.

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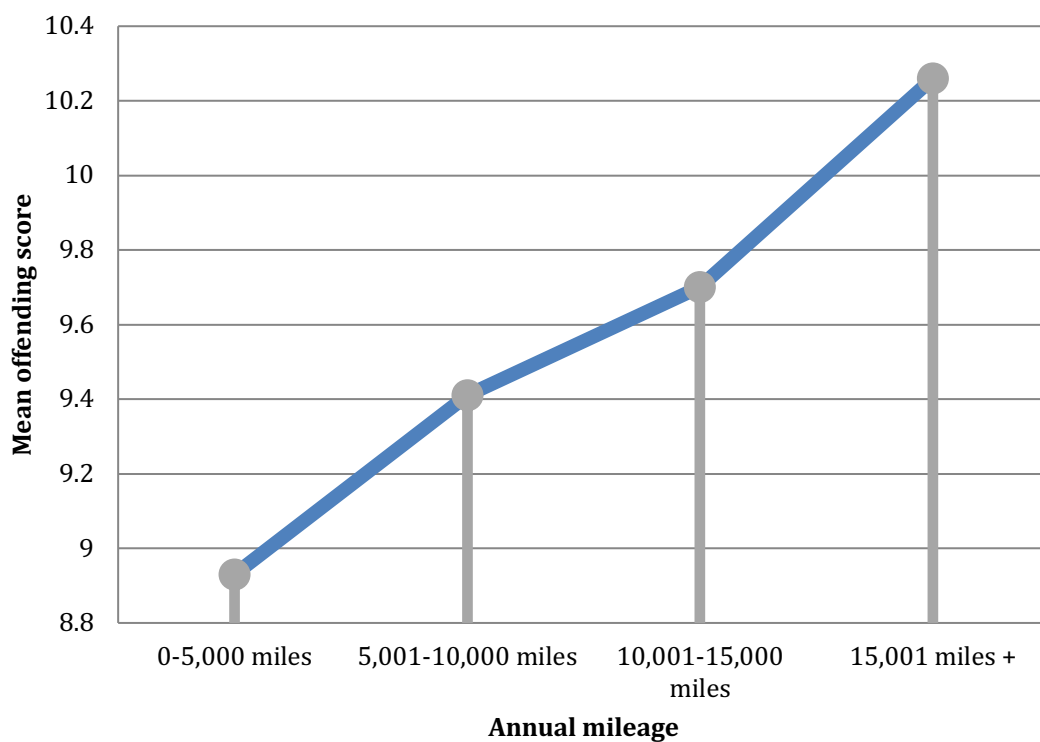
<sup>48</sup> Offending behaviours questioned were the use of a handheld device for texting and/or conversing, speeding, drink driving and failure to wear a seatbelt. Responses were relative to time spent driving (never, hardly ever, occasionally, quite often, nearly all the time).

<sup>49</sup> Four groups of mileage were categorised. Group 1 = 0-5,000 miles, group 2 = 5,001-10,000 miles, group 3 = 10,001-15,000, group 4 = 15,001 and above.



Figure 8.1 shows these mean differences through a line chart whereby the mean differences in reported offending can be easily observed. As self-reported mileage increases, so too does the frequency of offending, with those high mileage drivers more likely to have self-reported committing offences on a frequent basis, or to have self-reported committing a wider range of offences (prior to attending Crash Course). This demographic group are therefore more likely to offend, as may be expected given their increased frequency on the roads and therefore increased number of opportunities to offend. That greater time being spent on the roads may also result in an apparent greater need to ‘catch up’ with life outside of the vehicle, which may enhance the attraction of offending behaviours. Offences such as speeding and using a handheld mobile phone while driving provide some capabilities for regaining or at least ‘making the most of’ the considerable amount of time that is spent by some individuals within vehicles.

**Figure 8.1:** Mean offending score according to four categories of annual mileage (pre-course)



Similar results were obtained for the same analysis conducted of mobile phone behaviours (texting, handheld conversing and hands-free conversing) as opposed to offending behaviour more generally. There was a statistically significant difference in self-reported mobile phone behaviour for the four mileage groups:  $F(3, 753) = 6.94, p = .00$ . Again, only a small eta squared effect size of .03 was calculated, necessitating cautious interpretation of the results. However, post-hoc comparisons using the Tukey HSD test indicated that the mean score for group 1, annual mileage below 5,000, ( $M = 8.93, SD = 3.08$ ) was significantly different from group 4, annual mileage over 15,001 miles ( $M = 10.26, SD = 2.77$ ). The mean score for group 2, annual mileage between 5,001-10,000 miles, ( $M = 9.41, SD = 3.06$ ) was also significantly different from group 4. Thus, the act of using a mobile phone while driving does vary depending upon annual mileage, with the relation to the desire to maintain connectivity and ‘keep up’ with other aspects of life remaining important. Attempts to manage time effectively do not appear to simply exist within still spatial environments but appear to be continued within the swiftly moving roads environment.

In light of these analyses and in further consideration of the above quotes from PC Frank and Kevin, it appears that some aspects of life cannot be equally as easily regarded as unnecessary or ‘missed out on’. Rather, individuals fear missing out on many aspects of social life. “Defined as a pervasive apprehension that others might be having rewarding experiences from which one is absent, FoMO [fear of missing out] is characterized by the desire to stay continually connected with what others are doing” (Przybylski et al., 2013: 1841). These actions, environments or situations which individuals fear missing out on are likely given a higher priority than the task of driving that simply acts as a barrier to being in a multitude of social situations, albeit a necessary barrier that allows space to be navigated effectively and a wider range of those social situations to be experienced.

Rather than there simply being a time-space compression with technology reducing the distinction between time and space (Harvey, 1999) however, the relationship between time and space has grown increasingly complex. Individuals now have an integrated relationship

with space in that greater space can be accessed using many modes of transport or no longer needs to be accessed with the advent of mobile phone and communication technology. In this way, space and time have become compressed as more space can be physically accessed in less time. However, with that there often comes a greater (real and/or perceived) expectation for that space to be accessed in less time. With the knowledge that space can be accessed in less time comes a social expectation that it *is*. Far from being a joy or thrill, it becomes a social expectation that the space-time compression takes place.

Issues arise where deceleration is forced upon individuals, necessitating that they make effective use of time when space is free, and use of space when they have time. Consequently, when a road is not full of vehicles or there are fewer visible patrols policing behaviour, the temptation to exceed the speed limit increases. Whilst exceeding the speed limit has clear relations to the accelerated world, upon reflection, it perhaps fails to provide adequate benefits in terms of time productivity:

“I find driving like that [slower] it would normally take me about three and a half hours now to get to Devon where it probably took me three and a quarter hours before when I was pushing along a lot quicker, well it’s not worth it for 15 minutes is it? It just isn’t worth it.” (Offender Keith)

“I’ve just worked out, I remember one day in particular I was driving back from Scotland and I was just over the speed limit to be honest and I was amazed that I had done it for so long, I was doing 75, 77, you know, just going right up to the limits where I couldn’t, where they say 10% plus two<sup>50</sup>. I was just trying to escape getting into trouble but trying to pinch a few miles to get home that bit faster, and I was amazed that I had done that for nearly an hour at one point and

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<sup>50</sup> This is a reference to a widely accepted ‘tolerance’ applied in relation to the enforcement of speed limits.

it only equated to about five-six minutes differences, and I thought what are you going to do with five or six minutes?" (Offender Kevin)

Both Keith and Kevin questioned the gains sought from exceeding the speed limit whilst driving. An hour journey could save 5 minutes if the speed limit was broken consistently, providing very little additional time to use more suitably or efficiently. The unfulfilled promise of speeding may only serve to further enhance the perceived benefits of using a mobile phone while driving. A mobile phone can be used for the entirety of a journey, ensuring that a one-hour journey can allow for a whole hour of multitasking, or additional time. In comparison to the five minutes gained by exceeding the speed limit, this is particularly attractive.

As involuntary deceleration is also increasingly observed through traffic jams, speed cameras and speed bumps, for example, speeding becomes less reliable as a time-saving method. The use of a mobile phone while driving is able to overtake that of exceeding the speed limit in providing an advantageous accelerative force that allows for greater time benefits. A mobile phone can be used while driving whether or not an individual is stuck in traffic, behind a slow driver, stopped at traffic lights or waiting to pass a roundabout. It provides that possibility for acceleration, allowing for five minutes setting a reminder or an hour of conversation to have completed a task that an individual would otherwise spend alternative time completing. The task has been accomplished and the satisfaction of completing that task is felt. This satisfaction only encourages future continuance of the behaviour. As these decelerative forces are likely to continue developing as the number of vehicles and drivers on the roads increases, the attraction of mobile phone use while driving will only further enhance.

The magnetism of using a device to multitask, rather than to save a significantly smaller proportion of time through the commission of other traffic offences, apparently allows for a much more productive and effective use of time. This was most frequently noted as

important in relation to the working environment, where individuals were expected to work faster and increase productivity to have a greater economic value to employers. Time continues to have a firm relationship with money, as Marx suggested over 100 years ago (Marx, 1902/1968), and Jamie and Simon, below, reiterate:

“We all speak on hands-free kits day in, day out and although it does distract you, unfortunately, when you travel so much for so many hours and you're trying to do business at the same time, unfortunately it ends up being a necessity otherwise you can't do, you can't conduct business so it's kind of, you know, I mean the one thing is yeah, and a lot of people do see using hands free kits as part of their business because if you didn't, you know, if you're driving 6 or 7 hours a day that 6 of 7 hours' worth of business that's potentially being lost and stuff that you can't catch up on.” (Offender Jamie)

“Not to use your mobile phones will be a stressful situation for a lot of people when they're driving, and it will alter their work environment and a load of other things, so it will mean they will have to work longer hours, because a lot of people phone on their way home in the evenings, to finish off that last meeting, that last discussion, to get hold of that person they needed to, they are going to have to work an hour later or 40 minutes later.” (Employee Simon)

Communication with others plays a role in many areas of employment, making the mobile phone essential to such working practices. For those where communication is not a necessity, creating documents, using a diary, checking news updates or making notes may be. The mobile phone, allowing for all of those possibilities, becomes an increasingly valuable tool within the workplace. Further than this, it becomes an extension of the workplace (Eost & Flyte, 1998; Laurier, 2004; Yang & Parry, 2014), allowing all of those activities that are conducted in many lines of work to take place on a mobile phone. This

creates difficulties in blurring the distinction between work time, leisure time and home time.

Particularly with the time scarcity observed by many individuals in the acceleration society (Rosa, 2013), the mobile phone, as opposed to a landline or fixed telephone is highly attractive. It allows those tasks to be completed in small gaps of time, regardless of where an individual may be at that time. This potentially becomes *essential* for those spending a significant proportion of their working day driving (Laurier, 2004: 265). The attraction of using a mobile phone while driving in such circumstances enhances furthermore where other elements of their work require business to be conducted, phone calls to be made, emails to be sent and notes to be made. With these tasks being made possible, that social expectation of their use in an attempt to save time or manage it more effectively exists, regardless of the surrounding environment or driving situation.

These suggestions for explaining the above quotes are further supported by quantitative analyses of questionnaire data concerning reasons for vehicle usage. When asked for what purposes they spend most of their time driving, a much larger number of offender participants indicated that it was either for driving for work purposes or commuting to a place of work than did those who stated it was for social or pleasure (369 compared to 26, or 93% compared to 7%). A t-test performed on these statistics in relation to mobile phone offending behaviours found that those in the offender group who primarily used a vehicle for work purposes ( $M = 7.35$ ,  $SD = 2.28$ ) were significantly more likely to have admitted offending, or to have offended more frequently, than those who primarily use a vehicle for domestic and/or pleasure ( $M = 5.88$ ,  $SD = 2.75$ ),  $t(393) = 3.12$ ,  $p < .005$ . Similar results were obtained for employees<sup>51</sup>. This suggests that offending is more likely or more frequent in those who use a vehicle for work purposes, supporting the notion that work conflicts with the driving experience in terms of mobile phone use.

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<sup>51</sup> See appendix Q for these analyses.

Whilst some organisations recognise the risk of using a mobile phone while driving and create policies concerning employer expectations, even those policies may encourage drivers to use a hands-free device while driving (Yang & Parry, 2014). The alternative to using a mobile phone while driving would be to stay at work later or continue work beyond the workplace in order to access that time that would otherwise be made available through the use of a mobile phone while driving. It is now *possible* to do these things (technologically) and being prevented from doing so represents a possibility that is being denied. It is being denied, but all that stands in the way is the law. It is that law which consequently becomes a hindrance to behaviour and effective time management rather than a useful guide to behaviour (Wells & Savigar, 2017). The law contradicts what is socially expected of individuals in terms of productivity, potentially causing those who choose to obey the law to miss out in other areas of life due to the loss of time it necessitates.

#### **8.4 Employer satisfaction**

Allvin (2008) has suggested that the instability, insecurity and risk surrounding work in contemporary society has led to the emergence of the 'boundaryless job' (p. 20), where work interferes with several aspects of life as a result of increasing autonomy, flexibility and individualisation of work. Personal commitment to work is observed in such an era of uncertainty and unpredictability (Giddens, 2002), which encourages individuals to apply an increasing amount of time and effort into one's work. This raises concerns for the possibility that some forms of leisure time are reducing as working time increases, multiplied through technological possibilities that further allow work to take place at home. Meetings, diary updates, emails and document editing can all take place within the home environment; whilst sitting on the sofa, whilst cooking meals or even at the dinner table. The ability to conduct work at home (for many professions) is becoming easier.

It is not simply a home-based issue, but productivity is possible during any time of the day and in any environment, now more than ever with the technology of mobile phones and similar devices. When discussing the venue of the driver education course he had attended as part of his employment, James highlighted the significance of connectivity with phones even in work time:

“There’s a few things I know about that hotel [where the course took place] because I’ve been to a few events there; people know they have got to get in the bus to get back to the office, they’ve had a day out of the office, and there’s no reception for EE so we can’t access our emails and all our company phones are EE, so sometimes it’s a good thing, but people are rushing out immediately to see if they have any emails or to get the Wi-Fi code or whatever.” (Employee James)

Although the course took place during work time and was imposed by their employer, individuals had been without phone signal for almost two hours, which restricted in their possibilities for productivity and knowledge of the outside world. Observations of these courses supported this statement from James; many individuals looked at their mobile phones at the end of the course, with several moving straight to the hotel entrance to check their phones again. Although it was time out of their working day, individuals were eager for the bus to return to the venue to take them back to their vehicles or offices where work could recommence. The longer the time they spent waiting for transport, the longer the time they were spending without being productive or completing work expected of them. If work hours are not used most effectively *then* it may be necessary for individuals to conduct work outside of those hours, and with the boundaryless job or blurring of lines between work and home, this is often possible, or even expected.



Employer expectation also plays a considerable role in the driver behaviour of individuals and their decision to choose to use a mobile phone while driving, as Simon points out:

“You are expected to be contactable, you have operational needs, you are on call, that is what you get paid for, so you are changing your working conditions if you don’t do that, which means it needs to be a policy and a working conditions change and it also needs to have consultation to make sure members aren’t looked upon in a wrong way for not taking that call. I mean, if you sit in one of our dispatch centres they will say ‘I cannot get in touch one of the engineers, why is he not picking up that phone?’ And they will be brought to one side to talk about it.” (Employee Simon)

As an expectation of working practice, if an individual fails to respond to contact made by employers or colleagues, their work ethic will be questioned. Technological acceleration and its ubiquitous nature has allowed for the development of technologies that enable employers to identify the location of their staff, what they are doing, how fast they are working and any working issues that may arise at any given time of day. Consequently, it is expected that when questioned, or contact is made in order to initiate such questioning, a response is readily available. With the fluid and uncertain nature of the workplace, the possibility of unemployment increases and the associated fear, concern and anxiety of being without work influences behaviour within the workplace.

With a decline in traffic officers (House of Commons, 2016a), the risk of being caught is potentially reducing. Simultaneously, the risk of losing employment is perceived to

be high and is a concern of many individuals (Sverke & Hellgren, 2002). Consequently, it becomes more important to abide by employer expectation and to maintain employer satisfaction that to behave according to the law when on the roads (Dorn, 2017). Individuals continue to conform to that social and employer expectation by habitually behaving as is expected from employers, whether that be to use a mobile phone or not.

In contrast to the above quote from Simon, employers may recognise the importance of avoiding the use of such technology whilst driving or working. Where safeguards or additional legal implications are in place for those employees who do use a mobile phone while driving as part of their work, there is a lesser expectation and desire to do so:

“In the team I'm in, we say that, you know, if we're driving we wouldn't be expected to answer at all, you'd pull over into the safest place. I think there might be a pressure in other teams that you should answer your phone.” (Employee Linda)

“It says in our contract you are not allowed to answer your phone while you are driving. We all have voicemail on our phones so anything urgent will have to wait until I stop and deal with it. Basically its tough, if you're driving you don't answer it. No matter how important it is, it'll have to wait. Its, its erm, a really quite serious, you would be called up in front of, not just your line manager but their manager, if you were caught using your phone while you were driving.” (Employee Sarah)

For those that are not expected to use a mobile phone while driving as part of their work, the desire to use either a handheld or hands-free device is considerably reduced. Where these rules and requests for behaviour are *formalised* through the workplace, individuals are more easily able to recognise the social unacceptability of doing so – the pressure of responding is removed somewhat. Contractual rules stating that the use of a device whilst driving is prohibited provides an even greater incentive to refrain from using the device. In such cases, the means through which money is made is put at risk if such a device was to be used. There is no social expectation or contractual expectation; rather there is an expectation that individuals refrain from using such devices. This is a reversal from those alternative employment requests whereby individuals feel a desire to use such a device whilst driving in an attempt to save time for other tasks, or are even required to do so in order to acknowledge the job that they will be completing next or the location that they must arrive at, for example.

In those circumstances where an employer provides a valid excuse or justification for a mobile phone not being used, this exempts drivers from the social contract requiring them to answer a phone call, reply to a message or perform any other task on a mobile phone. It acts as a form of protection from the (employment-associated) consequences. The workplace, and employer expectation, therefore has a significant impact upon the attraction of mobile phone use while driving, further supporting the notion that productivity and money have an intense relationship with time, as Marx (1902/1968) suggested. If time is money, then spending time according to employer expectation is an important step in ensuring that money is continually available. Above this, rather than it being the case that time is money, as Marx suggested and Rosa (2003) repeats, it is the *effective use of time* that is the equivalent to money. In a society with a reduced certainty in employment (Keim et al., 2014), presenting

oneself as the most productive employee that can provide the best value for money increases one's chances of survival in the competitive economic environment.

Consequently, one's driving licence, as a gateway to economic security through arrival at the workplace or as a means of conducting work, is precious. Both drivers and police officers recognised the importance of the driving licence, and in particular the 'clean' driving licence free of penalty points when discussing education as an alternative to prosecution:

"I think a lot of people will think that 'I'd rather take the course because it saves me getting 3 points' and you feel that, I mean you sort of feel, not that you've got away with it, but you've had the easy option, like you've had a slapped wrist instead of a kick up the bum [laughs], and it was like, yeah I can do that, at least it won't have any implications for my job with points on my licence, it won't have implications with my insurance."  
(Offender Kevin)

"The majority don't want points on their licence, there's implications around insurance premiums perhaps going up and things like that, and people that drive for a living, they have concerns about their, you know, their livelihood being affected and things like that." (PC Thomas)

For some it is a necessity to have a driving licence with no penalty points if driving is an essential aspect of their work. It can be an employer request that employees have driving licences free of points as an indicator of their safe driving ability. For others, the accumulation of points would result in the loss of employment due to an inability to drive for work purposes or the removal of the means to get to and from work.

Without work or economic maintenance, possibilities for basic living are questioned; how will bills be paid, how will food be bought, how will a home be maintained? When one's licence is at risk, one's livelihood is at risk (Wells, 2012: 113). Still, when individuals *are* caught committing an offence, that importance of the driving licence is maintained; 87% of offenders agreed that their decision to attend a driver education course was influenced by the desire to avoid penalty points on their licence. This is a considerable proportion of course attendees, suggesting that a 'clean' licence, or one with a reduced number of penalty points attached is central to the daily lives of drivers. There are many reasons for this, with the relation to the work environment being simply one of those.

Considering the relation between the driving licence, penalty points and work, a t-test was conducted comparing the desire to avoid penalty points on one's driving licence with primary reasons for vehicle usage. There was a significant difference between those who primarily used a vehicle for work purposes ( $M = 4.42, SD = .86$ ) and those who primarily used a vehicle for domestic reasons and/or pleasure ( $M = 3.95, SD = 1.34$ ) in relation to the decision to attend an education course based upon the ability to avoid penalty points,  $t(372) = 2.35, p < .05$ . Those who used their vehicle for work purposes were more likely to agree that their decision to attend the education course was based upon the desire to avoid penalty points on their licence than were those who used their car for other reasons. This suggests that the importance of the 'clean' or 'low-point' licence *is* linked in some way to the work context, or is more important to those who spend a large proportion of their driving time for work.

Thus, there is an importance in avoiding their presence on one's licence once an individual has been identified as an offender. *However*, this relies upon the existence of police officers on the roads and a perception that the likelihood of 'being caught' is

high. This may not be the case currently, as explored in detail in chapter 4. As such, employer expectation is able to continue to play a vital role in behavioural decisions - unlike the traffic officer, the employer exists and is visible in many ways on a daily basis, so much so that they cannot be avoided. This can be further explained in combination with the idea that individuals strive to achieve social conformity through behaving according to social expectation. The use of a mobile phone while driving is one such way in which this can be accomplished.

### **8.5 Social conformity**

Mobile phone ownership is at an all time high within the UK, with 95% of all households owning at least one mobile phone (ONS, 2017). Both mobile phones and the way they are used change over short periods of time; mobile phone designs become outdated, new applications are developed, novel communication platforms are introduced, and individuals are expected to remain up-to-date with these developments. Where individuals fall behind in understanding and responding to these developments, they risk losing out socially through a perception of having become socially inept or unable (Ling & Baron, 2013). Concern for making the 'wrong' choice (Giddens, 2002: 46), or simply not making the correct choice quick enough enhances the desire, particularly of younger generations, to remain connected at all times (Walsh et al., 2007) – to never risk missing out on any potential to keep up, or even accelerate beyond others in terms of technological communication. Consequently, these decisions regarding communication and mobile phone use are highly important to an individual's social standing.

Communication through technological means, as well as physical means, generally requires both (or more) parties to *be contactable*, both initiating and/or accepting contact made and

responding to that contact (Höflich, 2010). Communication can only work when that communication is mutually initiated and responded to. It could be understood as an invisible social contract being drawn whereby both parties must cooperate in order for that communication to be successfully accomplished, as Rousseau (1995) describes of unwritten psychological contracts within the workplace. Individuals may question the ‘contractual failure’ where this does not take place, as Jamie highlighted:

“People do feel obliged to use their phone. Even if they're told not to, they'll quickly say I'm not supposed to be using it but, you know, I'll call you back later' and people just feel obliged when someone's calling them because, you know, it's quite a personal thing” (Employee Jamie)

The positive aspects of communication can be easily understood – contact can be made with anyone, anywhere. Rather than this simply being a possibility of mobile phone connectivity, it is now almost an expectation, required of individuals regardless of their physical environment at that given time. Where this unspoken social contract regarding communication is broken, issues arise such as annoyance or worry on the part of the unrequited caller. This is not surprising given the uncertainty developed as a result of an unattended call. Not only is the information that the caller wished to highlight unable to be presented, further questions are raised regarding the reason for the communication not being reciprocated. In a society where individuals “are so dependent on their WMDs [wireless mobile devices] that anxiety increases when the device is absent — even when they are aware the device will be back in their possession shortly” (Cheever et al., 2014: 295), individuals are particularly likely to show concern or worry where that communication is not reciprocated, especially where it normally would be.

If the social expectation of responding to those calls or other forms of communication is not satisfied then the contract between caller and called cannot be fulfilled. This may have implications beyond simply that point of communication, particularly where the communication is initiated for work purposes and the consequences of failing to reciprocate communication are more than a missed call, message or other communication. Hence, individuals feel a necessity or obligation to use a mobile phone regardless of the environment in which one finds themselves. According to Geser, this adds an element of pressure and an inability to escape social life:

“One significant downside of cell phones is that they expose individuals to additional attributions of personal responsibility, because they reduce the availability of excuses of the sort: “I surely wanted to call you, but I was not able to because I didn’t find a public phone’.” (Geser, 2004: 16)

There are an increasing number of environments and circumstances under which social life has the potential to regulate normality and expectations of communication, with mobile phone use being one such way in which that is completed. The freedom that is often associated with the development of new technologies actually fails to be realised in such circumstances, where social contracts and expectations overwhelm. Rather, as the quote, above, from Geser highlights, social responsibility becomes prevalent and almost overtakes in importance responsibilities that are held in other areas of life. The provision of communication technologies *within* vehicles exacerbates these issues, for surely a device offered in such a way with a multitude of potential benefits should not be ignored? No longer is it credible to claim that one’s phone was out of reach or could not be answered as they were driving. It is not possible to simply be ‘out’ when someone calls as in the past. The social expectation surrounding the use of a mobile phone *does* continue into the vehicular and roads environment, with pressures from social groups combined with support



and encouragement from vehicle manufacturers who continue to provide capabilities for communication in various ways.

It is not only individuals that have to 'keep up' with social life, but manufacturers and companies themselves have to progress at a speed that is suitable for the consumer market that also has experienced a form of acceleration, or the speeding up of development, production and (potentially) sales (Rosa, 2013). As a result, the driving public are informed of how vehicles are developing in order to attract consumer expenditure – they move faster, drive smoother, park easier, increase the safety of drivers, but at the same time provide new communication and technological capabilities that set them aside from other vehicles that are made available (Peugeot, n.d; Ford, n.d), as Kevin highlighted:

“Initially I thought it was a good thing that cars were embracing technology and moving forward. In fact, in particular I can remember driving one of the Ford Focus’s of the sales reps and it had actually got voice recognition where you could say ‘phone home’ and it would do it, which I thought was a fantastic feature. But now I just think it makes you more likely to make that call... I mean I don’t think you need those distractions.” (Offender Kevin)

The ability for vehicular technology to assist in simplifying daily tasks *appears* both useful and attractive to the general driver public (as well as being permitted in law). In portraying such immense benefits of these developments, individuals are able to recognise the positive aspect of their existence, with little consideration of the limitations as the overwhelming call to focus on those positive benefits clouds an understanding of those limitations. Not only is the distractive nature of hands-free devices largely unrecognised by the general driver population (White et al., 2004), but the development of those devices is seen here as encouraged and sought by drivers such as Kevin. The widespread provision of such technology concurs with legislation in the suggestion that there is no danger in the behaviour and potentially encourages individuals to use those devices where available.

Vehicles that provide the ability to multitask, to drivers who have not been given any information to suggest a danger to the use of such technology, become difficult to resist.

The availability of communication technologies, both within and outside of vehicles is followed by the assumption that such technology is used. This, does, however, influence the social expectation surrounding mobile phone use in terms of the ways in which that use is adopted. Considerably greater preference is afforded to the use of a hands-free mobile phone while driving. Whilst only 3.9% of caught offenders agreed that the use of a *handheld* mobile phone while driving was quite acceptable<sup>52</sup>, a much greater 58.4% agreed that the use of a *hands-free* mobile phone while driving was quite acceptable. Similar statistics were observed for employees, with only 2.1% agreeing that the use of a *handheld* mobile phone while driving was quite acceptable but 50.4% agreeing that the use of a *hands-free* mobile phone while driving was quite acceptable. As the expectation *is* to use such technology within many social circles, adopting that use allows social expectation to be met, or social conformity to be achieved, further enhancing the desirability of its use. In this hands-free manner, rather than its handheld alternative, it is the failure to use a mobile phone while driving that is deemed socially unacceptable - using it in this way is both socially *accepted* and *expected*.

## **8.6 Identity malleability**

The formation, reformation and reflexivity of identity play a key role in the behavioural attraction of using a mobile phone while driving (Buckingham, 2008). A development of postmodernity, the mobile phone greatly assists with this need for reflexivity in terms of identity and self-portrayal. It allows individuals to speak to others, present their social lives and have access to goods and services alongside many other identity-promoting qualities.

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<sup>52</sup> Prior to experiencing Crash Course

This expectation or need to present one's identity does not cease when an individual enters a vehicle.

This was described by a number of interviewees who held their status as a responsible parent in high esteem but that had resulted in the use of a mobile phone while driving to maintain such an identity, as explained here by Lucy and Rachel:

“You might think well a quick text while I'm stuck in traffic, you know, I'm not going to lie, I've done it before, stuck in traffic, checking your phone, have the nursery rang, you're running late, you know, you do tend to pick up your phone.”

(Employee Lucy)

“I was late picking my daughter up, I'd forgotten what time it was, she was ringing and ringing and ringing me, 'where are you, where are you'? I knew I'd got 5 or 6 missed calls while I was driving so I literally went to pick the phone up off the seat to say I was on my way, you know, and that's what happened, I got caught with it.” (Offender Rachel)

The driving environment can serve to support those identities that individuals attempt to develop elsewhere. Alternatively, those identities prevalent within driving situations - that of the safe driver or speedy driver, for example - may either contradict or support other identities that individuals wish to maintain in other areas of life. If a parent is driving their children to school they can both be a responsible parent and a safe driver. If they are late, one of these identities must be compromised somewhat. They can exceed the speed limit to ensure that their children arrive at school on time, jeopardising their identity as a safe driver but maintaining that as a responsible parent (within the school environment albeit not on the roads). Alternatively, they maintain their identity as a safe driver but not necessarily that of a responsible parent by abiding by speed limits and risking their children arriving late to school.

One's identity as a safe driver is more malleable and is possible to manipulate on a regular basis, between journeys as well as within them, but that of a responsible parent is more static and observed by others that have more enduring relevance to our lives and prolonged influence upon our identities than the population of anonymous road users. Consequently, it is perhaps more likely to be that identity on the roads that is left at risk or changed to ensure the maintenance of that as a responsible parent.

Similarly, for mobile phone use while driving, a phone call, message or email can have considerable implications for one's identity. Initiating those forms of communication or failing to do so can allow particular identities to be formed, maintained and altered or removed. If a parent ignores a phone call or message from their child they again risk their identity as a respectable and responsible parent. Such a call or message may be initiated by a responsible parent to ensure the wellbeing of their children, or may be responded to in the case that a failure to respond to a call or message may implicate that identity.

Even without responding to or initiating contact with others, interaction with a mobile phone takes place in the possibility that an individual has missed an opportunity to interact with another of potential high social importance in their lives. In addition to this, identifying a lack of missed calls, or the knowledge that nobody has attempted to contact oneself, suggests that all is fine and no part of an individual's non-driver identity is being questioned due to a lack of attention/response (at least through the form of a phone call). The above two quotes also highlight how time plays a central role in the use of a mobile phone while driving. It is essential that interaction is made with others if an expectation of arrival is assumed, as late arrival signifies a less able, responsible or reliable individual.

Although Rachel explained that it was not 'normal' behaviour for her to use a handheld mobile phone while driving, when forced into a situation whereby failing to adopt the behaviour would question her identity as a caring, responsible parent, the attraction of the

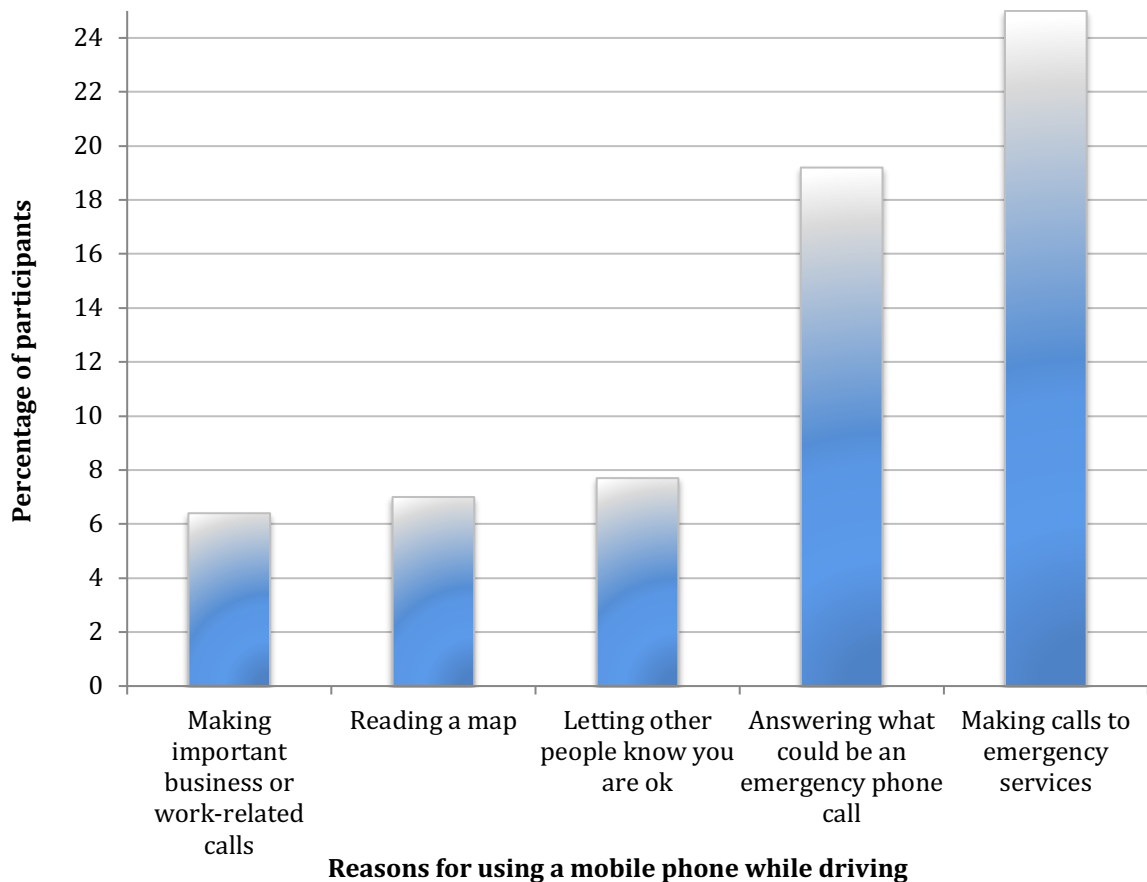
behaviour increased immensely. The driver identity is reflexive and continually changing as the driver environment also changes more frequently. Weather, road conditions, journey time, time of day, other road users and the vehicle being driven are only a small number of factors that influence a driving experience, ensuring that no two journeys are the same. Furthermore, with the general speed of progression on the roads, at least in comparison to other travel networks, identities are formed and yet can also be taken away in an instant with the anonymity largely associated with driving. We can be whoever we want to be in any given encounter and we can stop being that person in a turn of a corner, when moving in traffic and at the arrival of a destination. That identity is so short-lived within the fast-paced movement of the roads environment, the possibility for reflexivity is considerable.

This driver identity, however, contrasts with those other identities that are maintained by the mobile phone – identities that are more consistent in an individual's life than that of 'driver' or 'road user' may be. As Rachel, above, explains, they include that of a parent, as well as that of a friend, lover, employee. These identities remain malleable in that they can change at any given time, however, they are consistent in their continued existence in an individual's life. Whilst these identities are consistent to some extent, the way that they are portrayed changes depending upon a range of actions, including how one acts within a vehicle. The doting parent can become the uncaring parent with a single missed call, for example. Thus, there is a discrepancy between the useful malleability and reflexivity of certain identities such as that of driver, with the desire to maintain the positive elements of other more stable identities such as doting parent. As such, there may be times in which the use of a handheld mobile phone while driving may be deemed 'acceptable' to individuals.

When asked within the questionnaires what individuals believed were acceptable reasons for using a handheld mobile phone while driving prior to experiencing Crash Course (see figure 8.2), 6.3% of caught offenders stated that making important business or work-related calls was acceptable, 7.7% stated that letting others know they are ok was acceptable and 7% stated that reading a map was acceptable. The number stating that answering what could

be an emergency phone call was an acceptable reason was considerably higher, at 19.2%. An ‘emergency’ call has much greater importance and credence, and therefore is likely associated with a much higher acceptability in terms of using a device for that reason. This was similar to the number who stated that making calls to emergency services was an acceptable reason (25%), suggesting that a potential ‘emergency’ phone call from a loved one has an almost equal importance to that which would require the attention of the emergency services.

**Figure 8.2:** Percentage of offenders indicating acceptable reasons for using a handheld mobile phone while driving at pre-course (n = 898).



That emergency may range from the safety of a child to the working demands of an employer, as ‘emergency’ means different things to different people at different times of day, according to different identities that are important to them and the social situations in

which they find themselves. As such, that emergency is subjective and individual-dependent rather than universally understood; a question enquiring into personal acceptability of using a phone for the same reasons may have yielded even greater results than the more general wording used.

A two-way between groups ANOVA was conducted to examine any differences at pre-course between these general perceived acceptable reasons for handheld mobile phone use and age and gender. The interaction effect between age and gender was not statistically significant  $F(2, 523) = .31, p = > .05$ . There were also no significant main effects for age  $F(2, 523) = .30, p = > .05$ , or gender  $F(2, 523) = .28, p = > .05$ . Thus, the reasons for perceived acceptability of handheld mobile phone use while driving do not differ significantly by age *or* gender. This suggests that individuals of all ages and genders indicating some form of acceptable reason for using a phone while driving held a similar notion of acceptability. Although the form of identity associated between, and even within, each of those 'acceptable' reasons likely varies, from productive employee to esteemed friend, it may *be* that reflexive form of identity which is the universal link between those individuals. That the use of a phone allows for the portrayal of some element of identity resonates with individuals of varying ages and genders. Regardless of age and/or gender, everyone has an identity of primary importance that has the ability to influence their behaviour on the roads, even where that behaviour is illegal.

Throughout this chapter, much attention has been paid to an identity of a reliable, doting parent with numerous quotes highlighting that parents are willing to break the law in a sacrifice to saving that identity. Alternatively, for those who place high value on their identity as a reliable friend, a call, message or social media update from their friends may be irresistible to refrain from responding to. For those who spend a considerable proportion of their time driving for work or to and from a place of work, keeping in touch with employers may be essential in ensuring that their working day progresses smoothly and they are able to exist as efficient, productive employees.

Taking photos, updating social media and keeping in touch with those within one's social circle through group messaging allows identities of the technologically savvy, popular, fun, socially active individual to be presented. Updating reminders, calendars and diaries allow those of the trustworthy colleague, reliable employee and organised businessperson to be maintained. Making or accepting phone calls more generally can allow for those friendly, connected, supportive, helpful, loyal identities to be presented rather than risking those of an ignorant, unreliable and uncaring individual to be portrayed. A range of individual identities can therefore be influenced by the use of a mobile phone, sometimes simultaneously, and sometimes as a result of being caught, a range of identities are again influenced by the behaviour, as Michelle explains:

“I was quite embarrassed that I had to tell my boss what had happened because of work, and then obviously I couldn't get back in time to pick up my children, so I had to explain to my children what I had done as well, and obviously my eldest one is 13, and when I teach him everyday about rules and I had to explain to him that I broke the rules, it makes you feel quite ashamed really. I wouldn't want to be in that position again.” (Offender Michelle)

That identity as a responsible, law-abiding adult is one held by many individuals (Orr, 2013), and ironically plays a central role in understanding offending behaviour on the roads. Whilst drivers often admit to committing offences on the roads, they continue to perceive themselves as law-abiding citizens (Orr, 2013). The term 'law-abiding offender' may be used to describe such individuals who are generally respectable, law-abiding individuals in any other area of life, but break the law on the roads for a range of reasons (Wells & Savigar, 2017). This offending behaviour may not even knowingly take place; it may be a result of a lack of understanding of the law. It may, however, be a temporary disregard to the law that is for a small period of time deemed less relevant to an individual's



behavioural choices than surrounding influences, such as the desire to maintain a certain identity.

The law-abiding identity is another significant identity that plays a central role in the representation of who we are, and continues to be so on the roads (Wills & Wells, 2012). However, processes of maintaining that identity despite committing offences on the roads have previously been discussed, allowing perceptions of oneself as respectable, and at risk rather than *the* risk to be maintained somewhat (Wells, 2007: 9). For example, individuals may underestimate the importance of policing that particular action or may identify themselves as ‘victims’ of a system that preys on those hard-working and respectable individuals who are able to pay fines and therefore fund policing (Wells, 2007: 10). These perceptions of roads policing, when enforced upon oneself, allow individuals to maintain that law-abiding identity, despite having been identified as an offender on the roads.

It is significant that the chances of getting caught, and therefore having to face this challenge to identity, are relatively small. The law-abiding identity often can be relegated on a short-term basis, temporarily seen as an identity that is less important than other identities, as a result of the reduced likelihood of it being questioned. The implications may be equally as great, or even more so, for one’s law-abiding identity as for any other identity, however, the likelihood of that law-abiding identity being questioned is far outweighed by that of being a good parent, employee or friend, for example. If an individual believes that they will not be caught but they *will* miss a call, message or update from somebody else then the balance tips in favour of the more realistic possibility.

An individual’s law-abiding identity has a value and as such appears to be able to act as a guide regarding how to behave in particular situations or under circumstances. Issues arise, however, where that of law-abidingness comes into conflict with other identities, such as that of the responsible parent or the reliable friend, as those identities have the potential to

trump that of ‘law-abiding’, particularly where there is an apparently legitimate reasoning behind the behaviour that is performed in order to maintain that alternative identity.

### **8.7 Perceived personal control**

The concept of perceived control has been studied in many areas of life, with the general definition of the term referring to the belief that an individual is able to determine their own lifestyle, environment, behaviour and/or desired outcomes resulting from past experience, the social context and the physical context in which one finds themselves (Skinner, 1995: 8). Perceived behavioural control (PBC) plays a central role in the Theory of Planned Behaviour (TPB) (Ajzen, 1991), which has been subject to considerable analysis within the roads environment (Parker et al., 1992; Elliot et al., 2007; Forward, 2009). Such research has generally offered support for the use of such a model in explaining driver behaviour, suggesting that perceived control does have some role to play in the decisions made on the road. The TPB uses the notion of PBC as a reference to the belief that an individual is able to determine the outcome of a given act or the success with which one feels they would reach such an outcome.

Rather than using this reference to perceived behavioural control that has been considered elsewhere, however, it will be considered here how drivers may use a mobile phone in an attempt *to gain control* rather than as a result of control already believed to exist. The insecurity and instability that Giddens (2002) describes of the ‘runaway world’ can be applied to this theorisation well. The detraditionalisation and lack of clear guidance for living described of such a world necessitates that individuals have to make multiple decisions on a daily basis regarding a multitude of everyday activities or interactions (Giddens, 1991). Whilst this autonomy and choice appear beneficial, they can become overwhelming (Rosa, 2013). Consequently, individuals appear to attempt to develop some form of control, or at least perceived control, over their lives and the actions within them.

This control can be observed through the choice of whether or not to initiate or respond to communication with others, as Steve highlighted within an interview:

“Previous to that course I would answer every phone call, wherever I was, whatever I was doing, whatever kind of road type I was on, whatever road conditions I was in, whereas now, because obviously the caller display comes up and I can see who is calling me, now I would think twice about whether I would need or want to take the call. So it’s a couple of seconds thought of ‘am I comfortable taking this call right now?’” (Employee Steve)

Despite having attended a driver education course outlining the issues regarding mobile phone use while driving, Steve pointed out that if a call being received was from an individual that he wished to communicate with then he would allow that conversation to take place. He simply now benefits from the control of deciding whether or not to accept that contact initiated by others. He also perceives an element of control over the driving situation if he remains willing to use a mobile phone while driving, albeit a hands-free, legal mobile phone, as he would only take a call in a situation in which that perceived behavioural control was high. With the development of technology, individuals are able to see who is calling or texting, even if they do not feel the need to respond to that contact. The choice to take that call allows a sense of control, and may only take place if a driver feels that they are able to control the situation on the roads at that time. The road conditions, weather conditions, rate of traffic and type of journey all likely further influence that decision.

A law that prohibits the use of a mobile phone while driving in any way would take away some element of this control. This is problematic for a society potentially ‘obsessed’ with their mobile phones used to ritualistically checking them throughout the day (Misra et al., 2016), as described by PC Mike:

“I think people can’t live without their mobile phones now, that’s the main one, it’s just the used to having it attached to their hand, be it to make a phone call or text message, or whether it’s sometimes, daft as it sounds when you’re driving, social networking is the big one, and just general use of your phone, people can’t be without the thing even when they’re driving, and it’s almost like saying ‘I want to take your phone off you’, whereas really it’s just trying to stop them using it.” (PC Mike)

The use of mobile phones can be seen as almost a tradition of postmodernity that provides repetition and ritual in today's information society. As with other postmodern customs, mobile phone use requires decisions to be made in how the phone is used, when it is used and what the phone is used for within different situations, necessitating a continuous reflexive state of interpretation and use. Their use is certainly characterised by that repetition that Giddens (1991) describes as a defining aspect of detraditionalised custom. For individuals attempting to gain some element of control over their lives through mobile phone use, the prohibition of the behaviour has great implications as those attempts to provide some form of tradition, ritual, or certainty are now being taken away from individuals in the roads environment.

The use of mobile phones is continuous, repetitious and frequent, almost ritualistic, as is expected within any form of tradition according to Giddens. Further than becoming a form of tradition, the use of a mobile phone may even be an addiction for many (Cheever et al., 2014), making that prohibition even more complex. Just as Giddens (2002) argued that we could become addicted to many everyday objects and tasks, it has been suggested that many individuals in contemporary society *are* developing addictions to their mobile phones (Salehan & Negahban, 2013; Roberts et al., 2014).

The psychological health risks associated with mobile phones are becoming increasingly concerning, with symptoms of behavioural addiction including thoughts of mobile phones overriding other thought processes, a sense of pleasure when using a mobile phone and feelings of withdrawal when unable to use a mobile phone (Walsh et al., 2008; Cheever et al., 2014). Restricting that use when an individual is driving therefore has potential implications for their psychological wellbeing. Simon alludes to this when he states that ‘not to use your mobile phone will be a stressful situation for a lot of people’ (Employee Simon), as does one of the police officers in stating that ‘people can’t be without the thing [mobile phone] even when they’re driving’ (PC Mike). The removal of a mobile phone for the entirety of a journey is a major issue of concern for many individuals.

The more recent concept of the ‘fear of missing out’, or FoMO (Przybylski et al., 2013) can also be used to support the notion of addiction within postmodernity. Difficulties arise in remaining connected and continually up-to-date in a society with a multitude of possibilities and changing traditions. Individuals may consequently experience anxiety when they feel they are missing out on new pieces of information or updates from others (Elhai et al., 2016). As with addiction, individuals fearing missing out attempt to remain connected to that which they fear missing out on, experiencing symptoms of withdrawal when that is not possible (Cheever et al., 2014). Indeed, Cheever et al. (2014) found that even restricting the visibility of a mobile phone elicited anxiety in those who frequently used mobile devices, without the device even being taken away from their person. However, with the nature of postmodern society being unstable and changing so frequently, the likelihood of success in that attempted security and stability development and maintenance is reducing.

Avoiding an experience of FoMO can be maximised by ensuring control over the way a mobile phone is used while driving. Many drivers, including Debbie, below, noted how ‘important’ calls would continue to be made even after attending the education course:

“I've made much fewer calls using my hands free than I had before. I used to use it as, you know, if I've got 2 hours to drive to a meeting that's a good time to phone my mum because it will save me some time, that kind of thing, and I cut down on that a lot and thought actually I shouldn't really be on the phone at all, unless it's an important call, so I've really only made important calls using a hands free kit since the course and only then brief, you know, I'm going to be 10 minutes late or that kind of thing, rather than phoning people using a hands-free kit to chat.”

(Offender Debbie)

Rather than having to risk the feelings of anxiety and psychological distress associated with FoMO and mobile phone withdrawal, individuals are able to identify the nature of a call and the potential level of distress that would be caused by missing out on such information. A negotiation is made between the law, the identity at risk, the context in which the driver finds themselves and the behaviour that is expected (or may be adopted). A compromise may be made in particular circumstances whereby the action is adopted in a less obvious risky form (hands-free), for a short duration of time and only to those who have importance or high relevance to one's life – those for whom that risk is worth taking, particularly when it is reduced in these 'less risky' behavioural choices.

The use of a mobile phone in this way may therefore be described as a response to postmodern life and an attempted desire for control that arises as a result of both its instability and speed. In order to assess the importance of the communication, knowledge of who is calling, sending a message or attempting to communicate is needed. Refraining from looking at a mobile phone may therefore be one of the most difficult tasks regarding the use of a mobile phone while driving. An alternative would be to put a phone out of reach, which could still allow for hands-free connectivity, or even turn the mobile phone off, removing the possibility of any communication or use of a mobile phone while driving, but also removing all of those possibilities and necessities of the fast-paced, accelerated, runaway world described throughout this chapter. A failure to eradicate the principle

underlying concerns regarding time, social expectation, identity and control in an accelerated, uncertain life consequently allows for maintenance of the magnetism and desirability of using a mobile phone while driving. A confusing law, apparently seldom enforced has little chance of equaling all these very real pressures. Thus, the exploration of perceptions of risk that will be provided in the following chapter become ever more critical.

## **8.8 Summary**

The fast-paced and harried nature of contemporary life has been researched by many in an attempt to explain societal pressures and perceptions of time within contemporary society. The use of a mobile phone while driving is a clear lens through which to explore such issues. Saving time and using time effectively was described by many individuals as integral to the reasoning behind their mobile phone use while driving, or other offending behaviour. Saving time through the use of a mobile phone while driving was noted as particularly advantageous as it allows for a much greater saving of time than offences such as speeding and can be conducted where traffic jams or breakdowns prevent other forms of acceleration from taking place. It therefore allows for effective time management through multitasking, working on-the-go, keeping up with social life and saving time for other tasks required in life. Where time has a close relationship to money, the ability for enhanced productivity is extremely important to individuals, and mobile phone use while driving epitomises that sense of productivity through effective time management.

As the use of a mobile phone has become so widespread and the visibility of technological devices within vehicles continues to grow, it is no longer simply a *possibility* to use a mobile phone while driving but it has become, for many, an *expectation*. Driving is no longer a valid excuse not to communicate or keep up with life. The roads environment also frequently calls into question various identities. Interaction with family members, friends and employers no longer remains in the realms of those relationships, they enter all environments through the ubiquitous nature of the mobile phone. To maintain those

relationships that are of vital importance and the identities that are central to those, the mobile phone can be used, or not, whilst driving. To be a responsible parent is to ensure the safety of one's children, even if that results in one's own safety being jeopardised on the roads. If that identity of a safe driver becomes more important than other identities then the desirability or attraction of the use of a mobile phone while driving reduces.

Ironically, the use of a mobile phone while driving may provide a sense of control over one's life that is eliminated by many other forces of postmodernity, acceleration and the runaway world. By allowing that contact or those activities that are deemed most relevant to one's life to be continued when driving, but others to be negated, an individual has control over who, how and when others are allowed into their lives. This allows for a sense of stability and security in the form of repetition, increasing the attraction of using a mobile phone in all circumstances and environments, including that of the roads.



## **Chapter 9: The legal context of risk, safety and equivocality**

### **9.1 Introduction**

A societal concern for safety can be observed in various areas of life, with the proliferation of risk assessment, risk management and risk avoidance observed generally throughout areas such as policing, healthcare and finance, for example (Ericson & Haggerty, 1997; WHO, 2002; Jorion, 1997) and on a more individual basis regarding relationships and employment (Giddens, 2002). This chapter explores how the law as a guide to behaviour has not escaped an increasing societal concern for risk and how risk exists within a legal context. It is the purpose of this chapter to understand how risk has been used in actuarial ways to influence legislation, but also the difficulties associated with risk-based legislation within a cultural context. Risk is not always an objective measure and this chapter will identify the ways in which that is problematic for legislation based upon such an uncertain and unpredictable concept.

The chapter will begin with a general exploration of risk as an influential way of thinking about society. The complexity of using risk as a guide for behaviour will then be discussed in terms of the demonopolisation of expertise (Beck, 1992) concerning various risk-based behaviours and the issues concerning identity that result from such risk-based legislation. These issues will be considered amongst a base of research that has explored the nature of risk on the roads environment, with a discussion of its implications for safety and legality in particular. Finally, the chapter will end with an exploration of how risk-based thinking generates an enhanced possibility of insecurity and uncertainty, despite its attempt to recognise and control for potential negative experiences.

## 9.2 The uncertain nature of risk

Actuarial notions of risk describe the possibility to predict danger and hazards, appearing to offer some sense of certainty and measurability to *risk*. This helps explain the attractiveness of risk assessment, prediction and management in contemporary society (Ansell & Wharton, 1992; Linkov et al., 2006); they give a perceived level of certainty to issues and behaviours that are surrounded by ambiguity. Over time, risk has progressed from simply a scientific and economic term used to acknowledge potential hazards of developments, to one that attempts to explain the nature of behaviour and guide how one should act in many areas of life. This promise of certainty and calculability has created an increased focus on risk, with individuals using the term in discussion of everyday behaviours, employers using the term to convey their financial concerns and politicians using the term to convince others of their importance (Garland, 2003).

Despite this apparent promise of certainty, however, risk has become more malleable, uncertain and unpredictable, and more concerning, in what has been termed the ‘risk society’ (Beck, 1992). Beck (1992) describes the possibility of a ‘risk society’, or a near-future societal era increasingly concerned with the hazards that are largely produced and spread by scientific and technological developments evident as part of the modernisation process (p. 19).

Within the risk society, rather than experiencing natural forms of risk that are generally outside of the control of the human population or taken on a personal level, Beck (1996) proposes that the hazards observed are global risks that are a direct result of human action, therefore termed manufactured risks. He, alongside Giddens (1991) describes them as the result of overproduction, scientific knowledge and technological development rather than a lack of knowledge or undersupply of technologies available to ensure healthy living. According to Beck (1992), global industrialisation allows these risks, or at least our awareness of them, to multiply and become a central aspect of society (p. 58).

Although postmodern society may be preoccupied with a concern for risk (Beck, 2006), this does not result in a direct and easily observable existence of those risks – risk has to be found, identified and understood, which requires a great deal of time, effort and *expertise*<sup>53</sup> (Mythen, 2005). Handmer and James (2007) describe a ‘layering of risk’ (p. 120) whereby one form of risk may simply be covered by another, making it difficult to identify many forms of risk that have been ‘hidden’. Consequently, individuals encounter a ‘search for risk’ in their attempts to be knowledgeable and deal with risk in some way. Unfortunately, however, that search for risk and desire for knowledge is never complete as new risks continue to develop, new knowledge can be sought and an increasing number of risks present themselves in varying ways (Beck, 1992).

Advanced technology or scientific knowledge is sought in an attempt to assist with this attempted consistency in an individual’s life and to avoid the risks posed by those developed technologies, creating a commodification of security (Loader, 1999), although this desire is never actually met. Beck (1992) explains that this ensures a boundless desire for continual development and growth, which continue to bring additional risk. The control that is desired from their development is always out of reach – whilst it can be seen in the distance, the further we walk towards it, the further it continues to progress at a faster pace. There is a public need for security that never appears fully satisfied (Loader & Walker, 2007). According to Giddens (2002), this desire for knowledge is both *caused by* and a *response to* the risk brought about by modernisation. It is a circular issue that cannot be resolved.

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<sup>53</sup> As will be explored later in this chapter.

Furthermore, actuarial, statistical and objective notions of risk cannot be easily applied to an action that creates such emotional responses in reality. Zinn (2008) argues that the use of emotion, trust and intuition play a considerable role in a society concerned with risk. For him, rationality and non-rationality are not dichotomous variables that can easily be distinguished between but there are various approaches to risk between those that involve emotional responses to risk. Douglas (1986) too has argued that cultural discussions of risk are influenced by the values one holds, the interaction they share with others and their overall life experiences. She put forward a theoretical perspective suggesting that individuals develop their own notions of risk, what is risky and how to behave according to that risk, with those ideas being largely informed by surrounding social influences and shared within communities (Douglas and Wildavsky, 1982). The social nature of risk is emphasised here.

Nonetheless, where risk has attempted to be controlled, as actuarial notions of risk claimed was possible, efforts are continually afforded to the search for risk, identifying risk and controlling risk in some way. In an attempt to control risk in some way, political concern and attempted control increases – the law is one such way that this takes place.

### **9.3 Risk in ‘reality’**

With this increasing concern for risk, its existence has manifested into legislation, forming guides to behaviour that had not previously existed. The identification of risk is the first stage of the development of legislation based upon risk. For this to take place, it is generally the experience of harm resulting from a given risk that allows for an acknowledgement of such risk. An individual, or various individuals, will have experienced consequences of a given action, object or environment, at which point the reason for its occurrence is questioned. Following this identification of risk, legislation (often) targets that action, object or environment in an attempt to reduce the likelihood of future harm existing as a result of involvement with them.

In addition to this process of understanding risk and developing legislation targeted at 'risky groups', individuals are expected to become 'responsibilised' (Garland, 2003). They are warned of the risks that exist, provided with technological and scientific developments to reduce their risk and can then be blamed when they insufficiently utilise such knowledge and technology to keep themselves safe (Gilling, 2001). In this way, accountability is taken away from political institutions and passed onto individuals in territories of the unknown. Even for those actions that do not have a legislative basis, individuals are expected to make informed decisions regarding risk (Rose, 2000). This governmentality perspective of risk assumes that individuals are information-seeking, rational individuals (Foucault, 1979), that desire to be a 'good citizen' (Lupton, 2006: 14).

Such a viewpoint dictates that individuals should inform themselves of the information that is needed to keep them safe, and are often consequently seen to be to blame when they do not do so sufficiently:

“As discourses of risk proliferate, more and more risk-avoidance practices are required of the 'good citizen'. Risk avoidance has become a moral enterprise. It is deemed people's own responsibility to take note of risk warnings and act on them accordingly. Those people who fail to engage in such behaviours may thus often find themselves stigmatized and subject to moral judgments” (Lupton, 2006: 14).

The 'good citizen' is just one of a number of identities that individuals are expected to uphold. Not only are individuals expected to be law-abiding but they are also expected to be wary and prepared for those that are not. This has been suggested as forming part of a responsabilisation process that ensures individuals are responsible for their own safety, or risk (Giddens, 1991; Kemshall, 2002). Individuals are encouraged to fear others and act

accordingly, finding ways to minimise the risk that those feared environments, tasks or 'others' bring (Furedi, 2007: 2).

Still, the limitations of risk-based legislation ensure that when existing within 'reality', all associated risk is unlikely removed. Alternative forms of risk may be experienced, or an understanding of risk may fail to keep up with changes in risk and its malleable, cultural and unpredictable nature (Douglas, 1986; Mythen, 2014). As such, individuals look to experts for advice on how to behave and keep themselves safe. Difficulties arise, however, when expert information is not unanimous and guidance for behaviour is contradictory. With the nature of risk being based upon probability and estimation, possibilities for ill-informed and misinterpreted risk advice expand, or confusingly various different experts can be right at any one time (Beck, 1992). As risk is subjective, it is difficult to know who is 'right' in their interpretation of that risk, making it additionally difficult to understand which 'expert' to seek advice from.

Expert advice can be sought from various sources, ranging from police officers to social media sites and the reliability of each of these sources equally varies. As well as the varying nature of sources of information, the information itself that is made available to the layperson has intensified in its existence. More and more people claim to be able to provide an 'expert' opinion on a given topic and individuals are able to access that information, allowing themselves to potentially become 'expert' (Wells, 2012: 193). Beck describes this increasing visibility of 'expertise' as a 'demonopolization of scientific knowledge claims' (1992: 29). No longer are single experts observed in a given area of life with singular claims to the 'right' information. We now observe a mass of information from supposedly 'expert' sources, available in numerous formats and forming various conclusions.

An example of the massification and democratisation of expertise in the risk society would be the Internet (Weare, 2002). The Internet provides a single (and widely available) access point for a vast array of information, where experts of varying 'expertise' and opinions can

express their (unregulated, unvetted) thoughts and present information to a lay public who are expected to make informed choices from that information. In such a world of technological expansion and the availability of a considerable amount of information, the law becomes just one type of guidance that individuals are able to obtain. There is ultimately no single expert on risk (Beck, 2009). This makes it difficult for individuals to acknowledge which of those multiple truths to accept as a guide to their knowledge, attitudes and behaviour. Consequently, individuals attempt to become experts themselves (Hunt, 2003). In doing so, the 'self' becomes central to any understanding of risk as it is comparable to the 'other', or that risky population of which the individual claims not to be a part of (Weinstein, 1984).

The psychological concept of comparative optimism can be applied to this understanding of personal risk assessment. Comparative optimism (also known as optimism bias) refers to the idea that individuals believe they have a greater likelihood of experiencing positive outcomes than other people (Weinstein, 1980: 806). Whilst it has been suggested that individuals prefer to perceive themselves to be *at risk* rather than risky (Wells, 2007), they may exhibit a sense of comparative optimism alongside these perceptions, ultimately concluding that they are safer than others in various ways. As McKenna states, "it is not so much that individuals believe that negative events will not happen, but rather that these events are relatively unlikely to happen to them." (1993: 39).

This can be linked to suggestions made by Wilde (1982), that individuals behave according to a perceived level of adequate risk, with a manipulation of the risks surrounding an individual necessitated to ensure that desired level of risk in one's daily life is maintained. Termed 'risk homeostasis', he proposed that individuals aim to achieve a 'target' level of risk that they feel comfortable in attaining (Wilde, 1982). Individuals may consequently believe that whilst risk exists, it is not they themselves that pose such risk. Rather, they are able to successfully perform actions that will avoid the consequences. This allows them to maintain a higher homeostatic level of risk more generally.

The ability to perceive oneself as not a source of risk, but also not likely to experience the consequences of the risk, has the potential to lead those individuals to fail to acknowledge legislation or advice regarding risky actions (Weinstein, 1980). Smokers, for example, have been shown to exhibit a level of unrealistic optimism in relation to health risks associated with smoking (Weinstein et al., 2005). Legislation based upon risk that individuals do not believe they are personally associated with has the potential to be met with resistance. If the basis of legislation can be questioned, as well as its relevance to oneself, then support for it will likely reduce alongside cooperation.

#### **9.4 Risk on the roads**

Risks take various forms within the roads environment – speed, distraction, pedestrians and even the tyres that connect a vehicle to the road can form some element of risk to safety. Within vehicles, new developments, whether intended to improve safety or not, allow for new possibilities of risk. An improved braking system may cause drivers to follow another car more closely, an improved alarm system may lead drivers to leave valuables in sight and the provision of a hands-free system may encourage drivers to use a phone more frequently whilst driving. Individuals potentially negate all of the reduction in risk that such developments were supposed to provide by increasing their use of such features or using them in ways that was not envisaged upon their development (Handmer & James, 2007).

As with many other areas of life, risk on the roads has become ‘tolerated’, often accepted as simply a part of the experience and benefit of being able to move so freely and easily around the globe, as Beck explains:

“Risk... is tolerated in modern areas of social life. The deaths from traffic accidents, for instance. Every year a middle-sized city in Germany disappears



without a trace, so to speak. People have even got used to that.” (Beck, 1992: 46).

Risk within the roads context has become so prevalent that it is almost normalised and expected – a small price to pay for the significant number of benefits vehicles provide. The benefits of using technologies on the roads are vast and wide-ranging, with the development of such technology allowing for those benefits to multiply. Cars can travel faster, further and are continuously provided with inbuilt technologies and facilities that are said to improve the safety and satisfaction of road user experience (Peugeot, nd; Ford, nd; Honda, 2017). Possibilities are created for travel, work, relationships and social life that were not previously widespread or simply could not be performed. These possibilities and the excitement they arouse, however, disguise the risks and issues associated with their existence.

In addition to this, individuals are expected to *understand* risk in this context. This is difficult when ‘experts’ of varying reliability and credibility can be found, supporting different types of driver behaviour. Whilst one source may advise an individual to abide by speed limits in all circumstances, another may suggest driving according to the driving conditions (Brake, 2016), providing contradictory and conflicting advice. Even *safety* has been defined in varying ways by ‘expert’ sources. For those that wish to remain safe *from prosecution*, advice to purchase devices that assist in the avoidance of detection may be followed (Wells, 2007). For those that wish to remain safe *from injury or death*, educational attempts to depict the personal consequences of particular behaviours may be more prevalent (Think!, n.d.b). For those who hold greater importance on saving time, manufacturer information depicting the speed and multifunctionality of a particular vehicle may be more likely to guide behavioural choice (e.g., Honda, n.d).

There is not simply a single form of information that describes a unified basis for behaviour on the roads. Individuals are left with a mammoth job of identifying that information which

they deem most important, relevant or worthy of attention in order to recognise how to behave. Where the massification of expert information is observed, however, individuals are more likely to find ‘expert’ advice that supports their own claimed expertise. This becomes additionally complex when individuals look to their own personal experience as evidence to support their beliefs or attitudes regarding road safety, using knowledge that is biased and often incorrect (Svenson, 1981).

One way that risk has been guided by ‘expert advice’ and attempted to be manipulated on the roads is through risk-based legislation. Such rules of behaviour often govern ‘what might be’ rather than ‘what has been’ (Gaventa, 2005: 28), not based on any notion of *mens rea*, or the existence of a guilty mind but simply as *mala prohibita*, or punishable simply due to its prohibition (Ross, 1960; Brooks, 2015). This is the case for offences such as using a mobile phone while driving and exceeding the speed limit. No harm is necessary before an offence is committed. The act of using a mobile phone itself or driving faster than 30 miles per hour in a 30 zone is enough to warrant police attention and prosecution. Consequently, individuals may have no intention to act in a harmful or dangerous manner, but may nonetheless experience prosecution as a result of such risk-based legislation that governs much behaviour on the roads.

Whilst policing strategies have been able to define any individual, regardless of their social status and/or respectable existence within society, as an offender, their use has also been redefined through public discourses of unfairness, revenue-raising, lack of safety and even putting road users ‘at risk’ (Delaney et al., 2005; Wells, 2007). Rather than simply accept this newfound identity of offender, or potential offender, Wells (2007) has claimed that those who would previously, and indeed continue to in other areas of life, be perceived as ‘at risk’ rather than ‘risky’, or as beneficiaries of police attention but not as targets of discipline, have reconceptualised themselves as victims within the roads environment – victims of those revenue-raising, inaccurately placed, unfairly used devices (p. 14). For these individuals, it is not they themselves that are the risk, as they are more skillful than

their fellow drivers (Svenson, 1981; Delhomme, 1991), rather, it is they that are at risk from 'others' and the enforcement activity that 'should' be targeted at those 'others'.

Whilst a driver's law-abiding identity may be called into question following the introduction of a risk-based law, for those actions that individuals had frequently previously performed with no intention of harm, resistance to the potential 'offender' status associated with the offence is likely to occur. This is in part a result of that personal understanding of risk that is obtained through experience and familiarity that the roads environment allows (Orr et al., 2013). In addition to this, the lack of identifiable victim of such an offence allows for almost a 'free conscious' to be maintained even when exceeding the speed limit that formed part of the law or other offences are committed (Morris, 1966).

The techniques of neutralization suggested by Sykes and Matza (1959) may also be applied to the roads environment in this way. They provide an explanation of how individuals may respond to this newfound 'risky status' that is placed upon them when they are 'caught' performing a behaviour that is now considered an offence but they do not necessarily appreciate the associated 'risk' of (Wells, 2012: 195). According to Sykes and Matza, the feelings of guilt and shame that are often associated with involvement in deviant acts result in various responses or 'techniques of neutralization' in which those emotive responses to deviancy can be reduced or overcome entirely. Using the information presented above, this can be understood as taking place through a risk manipulation process. This allows individuals to continue their involvement with deviant behaviour whilst minimizing or overcoming the associated feelings of shame and guilt by underestimating the risk associated with such action. Sykes and Matza (1959) proposed that five techniques of neutralization could be observed in juvenile delinquents that allowed for continued delinquency. These techniques were: denial of responsibility, denial of injury, denial of victims, condemnation of condemners and appeal to higher loyalties.

The first of these techniques of neutralization, denial of responsibility, allows individuals to deflect the accountability associated with deviant acts onto others, perceiving and describing their behaviour as acting outside of their control or as a result of the action of others. For example, a phone call that is initiated by somebody else allows the blame to be passed on to that person. The second, denial of injury, refers to the belief or claim that the behaviour has resulted in no clear harm. For example, where a collision has not occurred, there is no clear physical harm. The third technique, denial of victims, sees the victim as deserving or causing the problem behaviour. The fourth technique of neutralization, condemnation of condemners refers to the resulting shift of blame from oneself to those who are questioning one's behaviour, with the belief or claim that those 'condemners' are potentially criticising the behaviour as a response to their own deviancy or offending behaviours. The fifth and final technique, appeal to higher loyalties, suggests that the deviant actions are perceived as being committed with the intention of providing benefit to some people in some way, likely part of their social group, or that the norms of those groups are being adhered to, despite that conflict with wider social norms. Mobile phone use may be explained as necessary to advance their own as well as others' lives. Accepting a call prevents individuals from 'stealing' time from others and allows them to progress in their lives. Initiating a call allows that benefit to be experienced for oneself.

Since the proposal of these techniques of neutralization from Sykes and Matza, researchers have applied the possibilities of their existence to the roads environment. Herman et al. (1999) found that these techniques of neutralization could be used to explain a justification of road rage from drivers, whereby individuals committed acts of rage on the roads but neutralized their actions through a range of descriptions of their own behaviour as necessary, lacking a level of 'true' deviancy and a result of the actions of other drivers. Similarly, Smith (2003) found support for neutralization techniques in response to drink driving punishments as those who perform the behaviour believe that no harm is caused from it. Consequently, a labeling and punishment process associated with risky behaviour on the roads in this way may not act as a successful deterrent to offending behaviour on the

roads. Individuals may find ways of justifying or neutralizing their actions and fail to reform their behaviour as a result of legislation that informs of its social unacceptability. Thus, it is far from a simple process of identifying risk, providing legislation, and risk being removed. Risk within the roads context is much more complex.

### **9.5 To be safe or to be legal?**

Legislation developed in response to risk and in an attempt to reduce the likelihood of risk translating into harm, injury or death falls prey to all of these aforementioned issues surrounding an understanding of risk. It is expected by members of the public to be informed by the most reliable, up-to-date, honest sources that allow for an understanding of the risk associated with a given action. Actuarial acknowledgement of the probability of harm (be that in the form of a collision, injury or death) is one of the most reliable aspects of such information that can be obtained and therefore plays a primary role in the development of legislation (Linkov et al., 2006). However, the changing nature of the ‘risk society’ and the technology that exists within it requires regular updates of such information that legislation cannot simply keep up with or successfully progress alongside. Information falls out of date faster as risk is manufactured more frequently and in increasing ways. Consequently, to be legal and to be safe does not always mean one and the same thing – those actions that may have been deemed safe at one point in time or in relation to the development of a particular technology may now not be. Technology has further blurred this distinction between legality and risk.

Legislation regarding drink driving has been notoriously difficult to apply to ‘measurable quantities of drunkenness’, with the legal limit being the same for all but meaning different things to every individual according to body composition, gender, food and alcohol intake amongst various other factors (Baum, 2000). Even the NHS website states that “there’s no safe way to tell whether you’re within the legal limit” (NHS, 2015: 1) and instead suggests that individuals refrain from drinking any alcohol at all if they intend to drive – although

this is not synonymous with the advice given from legislative documentation, again presenting the issues associated with the existence of multiple experts to which individuals must pay attention.

Despite this information, however, breathalyzers have been made available to the general public rather than simply those policing offences. They allow individuals to establish the amount of alcohol in their blood, providing the ability for them to drive with just enough alcohol in their system to remain legally able to drive. This is regardless of the impact it is able to have upon their driver behaviour. The legal alcohol limit does not necessarily equate to safe driver behaviour but it is a level at which individuals can reduce their risk of prosecution, even if not their risk of personal harm. Consequently, rather than being used as a guide to safe driver behaviour in terms of the risk of collision, injury or death, legislation simply acts as a guide which (some) individuals are able to use to reduce their risk of prosecution and its associated penalties. There is a difference between legality and safety, with technology forming a link between the two.

Furthermore, individuals can both be safe and legal (for example, conforming to the speed limit where it is safe to do so) but they can also be safe and illegal (for example, exceeding the speed limit by 5 miles per hour on a motorway in clear weather conditions) or unsafe and legal (for example, travelling at 30mph in a 30mph zone but in poor weather conditions). Individuals are able to choose between a level of safety that they wish to achieve, or the level of risk that they wish to reduce, but that is not always in line with legislation and does not necessarily reduce their risk of prosecution, further complicating behavioural decisions on the roads.

With such legislation, it is not that the behaviour is prohibited, but that it is prohibited in certain forms or to certain extents. This makes it even more difficult to put into practice for the lay public who are forced into responsabilisation and to develop the knowledge necessary to ensure that the risk is avoided (Rose, 2000). Not only is it expected that the

law informs us of what is 'safe', but individuals are also expected to play a role in keeping themselves 'safe' (O'Malley, 2012: 7). This becomes difficult when technology is introduced into the equation and provides a continually changing sphere in which the law exists and actions take place. The use of mobile phones while driving also highlights this issue well – whilst mobile phone use is allowed in some forms, such as through a hands-free device, it is prohibited in its handheld form, allowing individuals to question the extent to which the behaviour itself is 'risky' when it is permitted in some ways.

Mobile phone use while driving therefore represents another form of risk-based legislation that contains various issues associated with such law and its application to the roads environment. Whilst mobile phone technologies have developed, legislation has not changed since 2003, allowing it to become highly outdated as a form of expert advice. Consequently, the risk posed by the behaviour has changed and individuals are expected to perform a number of risk analyses surrounding contradictory advice regarding safety and legality that are often outdated and insufficient. Even the law is not expert enough to guide behaviour within what Beck (1992) describes as the risk society.

These developments highlight how science and technology have allowed for the introduction of new possibilities and even the combination of two developments that were not initially seen as co-performing. They enhance the potential for risk but also create difficulties in recognising its existence, as risk changes, becomes malleable and develops in novel ways (Beck, 2009). Rather than remove an element of risk, the development of these technologies have simply hindered our view of previous risks or made the risk appear more satisfying and attractive, at least where the risk 'pays off'. Consequently, decisions concerning how to behave on the roads are not simply dependent upon an actuarial prediction of the probability of harm but are developed within a cultural discourse of risk that must be explored in more detail in order to gain an understanding of how and why risk calculations take place within the roads

environment and influence road user behaviour.

## 9.6 Summary

In response to an apparent proliferation of preventable risk (Beck, 1992), legislation has attempted to guide behaviour based upon its suggested risky nature. Alongside this, individuals are expected to show their status as responsible citizens through a process of identifying and responding to a wealth of information that describes the risks associated with a given action, object or environment (Rose, 2000). Individual identities are influenced by these hazards and attempts to control for them. Responsibilisation is not only made possible but it is expected of individuals who wish to uphold their status as a responsible, safe, law-abiding citizen. This is despite an absence of consensus from 'experts' regarding what action individuals should take. Consequently, issues arise in daily attempts to manage risk. It is not possible to simply understand risk as an actuarial, objective statistic. Rather, risk is malleable and culturally dependent (Douglas, 1978; 2003), and therefore experiences change over time, between individuals and in environments.

Although legislation has been based upon risk within the roads, technological developments have allowed behaviours that are legal to be unsafe and those that are illegal to be safe. Combined with a variety of sources of information that provide differing conclusions on the safest behaviour on the roads, as well as one's own personal experience, understanding how to act safely on the roads is not as simple as *acting according to the law*. This discussion of risk will inform the following chapter that applies the legal context of risk, safety and equivocality to the offence of using a mobile phone while driving, using empirical data collected as part of this thesis. Mobile phone use while driving is an ideal lens through which to explore the notion of the demonopolisation of expertise and the contradiction between legislation and developing technologies.



## **Chapter 10: Mobile phone use while driving within the legal context of risk**

### **10.1 Introduction**

As described within the previous chapter, risk within a legal context can be confusing, contradictory and difficult to understand. This chapter will explore these issues and the reality of risk-based legislation in relation to the offence of using a mobile phone while driving through an empirical analysis of interview and questionnaire data. Through in-depth analysis of interview data with Crash Course attendees, the ways in which individuals recognise and understand risk within a roads environment, and particularly in relation to the development of mobile phone technologies, will be discussed. Questionnaire data will further highlight the attitudes individuals' hold regarding risk on the roads and how those attitudes are not always consistent. Those notions of expertise and the *demonopolisation of expertise* (Beck, 1992: 29) highlighted in the previous chapter will also be discussed in terms of the presence of a multitude of conflicting information sources regarding mobile phone use while driving, and the implications it has for one's understanding of their own safety on the roads.

Through interview data with Crash Course attendees and course presenters as well as police officers expected to police the 'risk society' (Beck, 1992), the law as simply one of a range of apparent expert sources will be discussed in relation to empirical data suggesting that individuals themselves attempt to gain some form of 'expert' status as a result of their personal experience as a road user. Finally, the chapter will end with an essential presentation of how the offence of using a mobile phone while driving is not simple when experienced within a legal context of risk and a discussion of the difficulties associated with policing the offence.

## 10.2 Manufacturing risk on the road

### 10.2.1 Ignorance to manufactured risk

Over a short period of time, mobile phones have developed immensely, with their use within vehicles adapting to the ever-increasing popularity and essentiality of their ownership (Bianchi & Phillips, 2005). With their vehicle-based manufacture, *risk* too has been manufactured (Beck, 1992; Giddens, 2002). Whilst this risk has somewhat been identified, and has been responded to by various efforts to reduce mobile phone use while driving, the manufacturing of that risk has far from ceased. New technologies continue to be developed, as does their inclusion within vehicles. In addition to this, the invisibility or uncertainty of many risks, such as that of a hands-free device, allow for an element of interpretability in terms of the true 'risk' that a given action, product or manufactured development allows (Beck, 1992).

As Handmer and James claimed, the initial risks are simply being "layered over" (2007: 120) by new forms of risk that mask those previously identified. The replacement of the risk of handheld mobile phone use with the risk of hands-free mobile phone use is one such example of this, with hands-free mobile phone use seen as a safer and less risky alternative action. Despite a supposed preoccupation with risk (Beck, 2006), it is difficult to fully comprehend the 'invisible' nature of much manufactured risk as a result of this layering process. Even those policing the roads identified difficulties in recognising such risk, as PC Rob, below, depicts in his claim that individuals should only use a mobile phone while driving when it is hands-free:

"Most people know now with a mobile phone they've got to have a hands-free system fitted in their car... I think the simple thing is, if you get in your car and

your phone isn't connected to a hands-free system or via Bluetooth, you don't use your phone, because it is ultimately a distraction, and that is what causes accidents, it's being distracted, and not paying attention to what's going on around you or ahead of you whilst driving.” (PC Rob)

The invisibility of the cognitive risk associated with hands-free mobile phone use, combined with the layering process described by Handmer and James (2007) create an additional complexity in identifying risk, even for those policing the roads. The development of manufactured products and their frequent provision within vehicles creates a *sense* of safety through a discourse of acceptability that advertising of their benefits allows when combined with a range of expert advices including the law. Rather than being a choice for drivers, the use of such technologies is described by Rob, above, as something that drivers have ‘got to have’. Hands-free devices are a developed technology that appear to have been provided in order to enhance safety from distraction, collision, injury and death and are therefore seen by those policing the roads, such as Rob, above, and by drivers, below, as a vital piece of technology to keep individuals safe on the roads. This is regardless of their reported dangers (RoSPA, 2015a) and unseen (cognitive) risk (Schweizer et al., 2013).

Crash Course presenter Rose alludes to a similar notion of acceptability combined with a lack of understanding of risk, although not necessarily solely in relation to hands-free mobile phone use:

“I think the problem with motorists, they don't see picking up the phone as a problem. Half of them don't even understand the law. For a lot of them mobile phones have evolved over a period of time so when they took their tests this wouldn't have been an issue for them, they weren't even around... and people have grown up with mobile phones, used them all the

time.” (Crash Course presenter Rose)

The claim made by Beck (2006) that societal norms and expectations can hinder a ‘true’ understanding of risk are supported here. Particular elements of risk or even certain developments and technologies that themselves are embedded within a base of risk can become ignored and overlooked where societal support for their use distracts from their risks. Identifying the manufactured risk of given developments is consequently not simple – it is influenced by a range of factors that fail to allow for a simple, actuarial prediction of risk based upon probabilities and scientific knowledge (Linkov et al., 2006).

The obvious cultural benefits of mobile phones, wherever they are used, potentially outweigh in importance the possible risks. By their very nature as possibilities, or events that have yet to materialise, risks are not tangible, clearly evident or expected to occur. In contrast, the benefits of mobile phones are often tangible, clearly evident and have occurred; they *are* or *have been*, rather than *might be*. The frequent use of mobile phones identified by Rose allows individuals to easily identify these benefits, with the probability of benefit outweighing the probability of harm or negative consequences. This can also be explained of vehicle use more generally; the benefits outweigh the dangers for most people, most of the time, enhancing the likelihood that their use is continued despite knowledge of their associated risks.

Analyses conducted of offender questionnaire data support these claims. An independent samples t-test was conducted to compare the general perceived risk on the roads between those who admitted to using a handheld mobile phone while driving at least once in the six months prior to Crash Course attendance and those who reported that they had not used a handheld mobile phone while driving over the same time period. General perceived risk consisted of nine questionnaire items asking participants if they individually would feel safe driving over the speed limit, reading a text, driving a car that has not been well-maintained, eating food, driven over the legal alcohol limit, talking on a handheld mobile

phone, talking on a hands-free mobile phone, changing a CD and driving without wearing a seatbelt. The scores were significantly different between those who had used a handheld mobile phone ( $M = 22.67, SD = 4.40$ ) and those who had not used a handheld mobile phone ( $M = 23.54, SD = 5.44$ ),  $t(912) = 2.61, p < .05$ . Those who had used a mobile phone while driving perceived a lesser general risk on the roads according to a range of risky driver behaviours than those who had not used a handheld mobile phone while driving.

Similarly, there was a significant difference between those who had ( $M = 22.13, SD = 6.27$ ) and had not ( $M = 19.02, SD = 5.80$ ) used a handheld mobile phone while driving in the six months prior to course attendance for attitudes towards one's own safety (when asked about those same behaviours as above but in relation to how safe they would feel performing them),  $t(909) = -7.30, p < .001$ . Those who had used a mobile phone while driving perceived themselves to be safer in performing a range of risky driver behaviours than did those who had not used a mobile phone while driving.

Those who adopt illegal mobile phone use while driving perceive the risk on the roads to be lower and their own personal safety to be higher than those who do not. It is possible that this lower perceived risk encourages risky behaviour, but also that the adoption of the behaviours without the experience of any harm has reduced the perceived risk of the roads. This experiential understanding of risk is likely to act in both ways, with prior perceptions of risk influencing behaviour on the roads, and a realisation of risk into hazard, or lack of in this case, also influencing perceptions of the actual risk posed on the roads. As well as social interpretations of risk suggested by Douglas (1978; 2003), individuals likely use their own *personal* understanding of risk to inform their behaviour, reducing the focus upon those actuarial notions of risk that would encourage those same individuals not to perform the actions they have become so familiar with performing (in some circumstances and for some people).

In addition to this, there are particular social groups that appear to depict an ignorance to risk, or at least a distorted view of its existence. A two-way between-groups analysis of variance was conducted to explore the extent to which those young drivers defined within actuarial statistics as most likely to encounter road traffic death (RAC, 2011), perceive themselves to be at risk from a range of actions in comparison to other age groups and genders. The age groups were split using previous research highlighting the high-risk nature of under 26's who formed group one, with the other two age groups split up into 26-40 and 41 and above. Gender was also included in the analyses to identify whether males or females have differing perceptions of risk according to those age groups.

There was no statistically significant interaction effect between gender and age in terms of perceived personal risk at pre-course,  $F(2, 817) = .25, p > .05$ . However, there were statistically significant main effects for gender,  $F(1, 817) = 19.10, p < .001$ , and age  $F(2, 817) = 3.83, p < .05$ . Post-hoc comparisons using the Tukey HSD test indicated that the significant difference in age was between age groups one and three, or under 26 year olds ( $M = 22.33, SD = 4.94$ ) and over 41 year olds ( $M = 23.78, SD = 4.61$ ). There was no significant difference between those in the 26-40 year old age group and either other age group. This shows that there is a difference in perceptions of road risk between both males and females, and between under 26 year olds and over 41 year olds, although the difference in risk scores between these groups were not related to each other, or the age group differences did not depend on whether an individual was male or female and vice versa. The estimated marginal means plot<sup>54</sup> showed that females perceive a higher level of risk on the roads than males, whilst those over the age of 41 perceive a higher risk than under 26's.

Although risk may affect all, as Beck (1992; 2009) proposed when claiming that risk knows no boundaries, there do appear to be groups that show a lesser awareness of that

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<sup>54</sup> Please see the appendix R for the estimated marginal means plot.

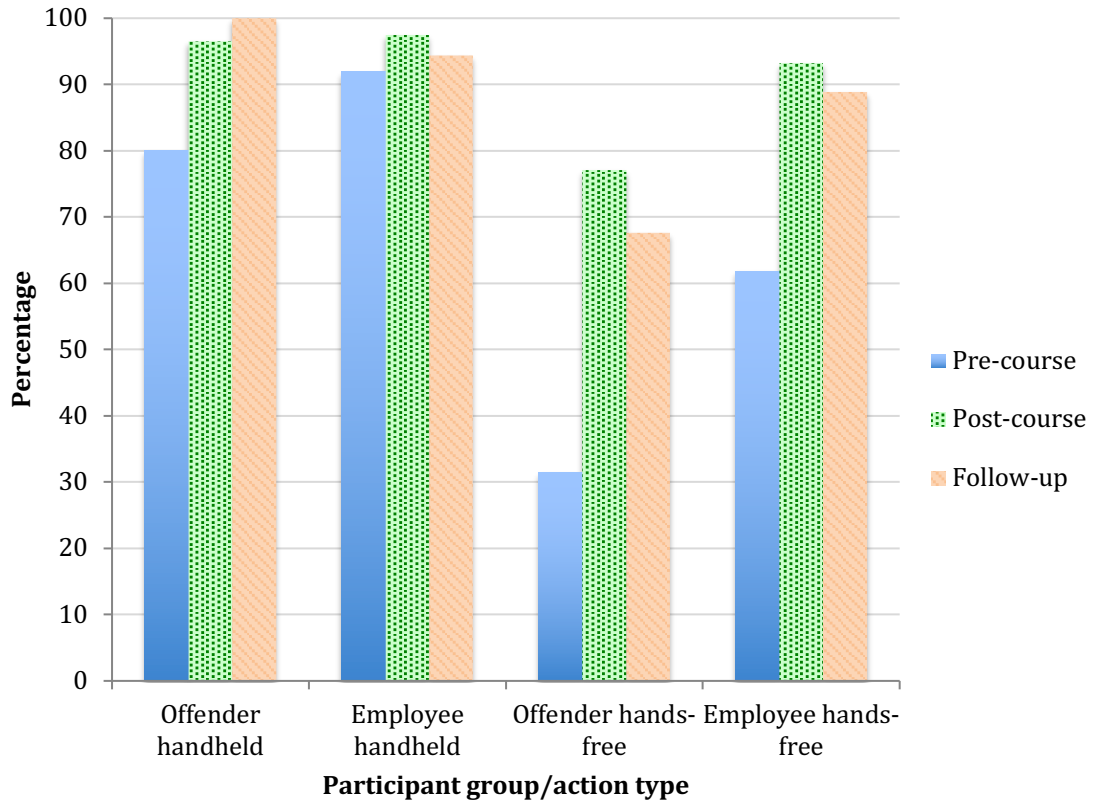
risk. Intriguingly, those who are most at risk, at least according to actuarial statistics regarding road traffic death (RAC, 2011; WHO, 2013; WHO, 2015), (males and those aged 25 and under) perceive a lower level of risk than other social groups. Despite attempts to enhance awareness of the risk, and legal measures to reduce risky behaviours on the roads, those most at risk continue to perceive a reduced level of harm, suggesting that those measures are not always effective in a society where risk is malleable and can be understood, or ignored, in differing ways.

### **10.2.2 Finding (some) manufactured risk**

Despite these issues in identifying manufactured risk, individuals *do* generally recognise some form of risk in the use of a mobile phone while driving. Not all risk is ignored or is difficult to observe in relation to the use of a mobile phone while driving. Quantitative data collected from questionnaires completed by those attending Crash Course as both offenders and employees at pre-course showed that the majority of individuals identified the risk associated with handheld mobile phone use while driving, although a smaller proportion of individuals recognised that of hands-free mobile phone use (when asked to what extent the actions increase the risk of a driver being involved in a crash), as can be seen from figure 10.1 and the subsequent statistical analyses.

For hands-free mobile phone use while driving that is not afforded the same level of obvious (physical and visual) distraction and legal prohibition, attitudes were less supportive of the notion that its use increased the risk of a driver being involved in a crash. Prior to receiving education, only 31.5% of offenders agreed that the use of a hands-free device increases the risk of a driver being involved in a crash. For employees this statistic was much greater at 61.8%, but still indicates a smaller awareness of risk associated with the behaviour than for handheld mobile phone use, as figure 10.1 depicts.

**Figure 10.1:** Offender and employee pre, post and follow-up agreement that “handheld/hands-free mobile phone use increases the risk of a driver being involved in a crash” (% agreed/strongly agreed)



In order to assess the significance of these differences, paired-samples t-tests were conducted upon handheld perceptions of risk and hands-free perceptions of risk at all three time points for both offenders and employees. There was a statistically significant difference in the attitudes towards the likelihood of both behaviours increasing the risk of a driver being involved in a crash at all three time points for both offenders and employees, as can be seen from table 10.1.



**Table 10.1:** Mean scores for attitudes regarding whether “handheld/hands-free mobile phone use increases the risk of a driver being involved in a crash” at pre-course, post-course and follow-up

	Mean (SD)		Sig.
	Handheld	Hands-free	
<b>Offender</b>			
Pre-course (n = 964)	4.09 (SD = 1.10)	3.03 (SD = 1.06)	***
Post-course (n = 201)	4.73 (SD = .66)	4.12 (SD = .90)	***
Follow-up (n = 34)	4.79 (SD = .41)	3.65 (SD = .65)	***
<b>Employee</b>			
Pre-course (n = 283)	4.53 (SD = .95)	3.65 (SD = .92)	***
Post-course (n = 119)	4.84 (SD = .60)	4.50 (SD = .69)	***
Follow-up (n = 18)	4.67 (SD = .97)	4.11 (SD = .58)	*

\*\*\* significant at  $p < .001$ , \* significant at  $p < .05$ .

Both offenders and employees were significantly more likely to agree that the use of a handheld mobile phone while driving increases the risk of a driver being in a crash than they were to agree that the use of a hands-free mobile phone increases that same crash risk. Although the level of significance was lower for employees at six-month follow-up, this was generally a universal perceived difference for both offenders and employees at all three time points. This information regarding the perceived risk of handheld and hands-free devices was also discussed within the interviews with both offender and employee course attendees, where individuals admitted to being unaware of the risk associated with hands-free mobile phone use while driving, as Debbie describes:

“I had really thought, ‘ok I understand why it's dangerous to actually hold

a mobile phone to your face', that's quite obvious because you can't control the car as well as you can with two hands, so that was obvious, but I thought using my hands-free kit was pretty safe really." (Offender Debbie)

Even following course attendance, a number of individuals highlighted that their hands-free mobile phone use while driving behaviour had been reduced, but not that it had completely stopped. This was particularly the case for those attending the driver awareness course as part of their employment:

"I would never answer my phone and hold it to my ear prior to the course. I've got my hands-free kit, but I am now much more, I will still answer calls on hands-free but I won't talk for hours like I used to, slight exaggeration, but its more so quickly to the point of, I'm driving, make it quick, and that would be the end of it." (Employee John)

"I was really shocked by one of my friends because she said even afterwards she would carry on using hands-free, because it would be an emergency call if it was a hands-free one, so she said she would take it anyway, and she would try to drive slower or something because she said you should manage your own risk." (Employee Zara)

These quotes show how individuals continue to find difficulties in recognising risk where its existence is largely *invisible*, even when it is *known*. Just as Beck (1992) described the malleable nature of societal understanding of risk due to its invisibility and incalculability, an understanding of the invisible cognitive risk associated with both handheld and hands-free mobile phone use while driving is often manipulated and underplayed in ways that it can benefit an individual. Consequently, even where risk is 'found', that does not necessarily appear to result in a full understanding of that risk or even a translation from

risk understanding to behavioural change. Where risk cannot be seen, it can be easily ignored, allowing individuals to remain at risk despite a perceived understanding and awareness of how to keep themselves 'safe'.

The above quote from Zara also depicts those notions of risk homeostasis discussed within the previous chapter. Although Zara was concerned by her friend's admission that she would continue to use a hands-free phone following attendance at Crash Course, she also described how her friend claimed that she would respond to the risk associated with the behaviour by reducing other forms of risk, such as reducing speed. This supports those claims made by Wilde (1998) that individuals manipulate their behaviour in order to maintain a certain level of risk, adapting to the surrounding environments and their own behavioural decisions. Consequently, it becomes difficult to recognise the risk associated with the action of mobile phone use while driving. It is likely a risk that is performed or adopted simultaneously alongside a temporary reduction in other forms of risky behaviour. Those risks, however, do not go away; they simply hide, condense or are ignored for a period of time. Rather than simply being based upon predictable, statistical notions of risk, an understanding of the risk associated with mobile phone use while driving certainly appears to be culturally interpreted and influenced (Douglas, 2003).

### **10.3 Political responses to risky phone use**

Following the identification of risk, one possible response may be to regulate that risk through the provision of legislation that guides and restricts particular behaviours. As described within the previous chapter, despite a number of issues surrounding the existence of risk, much roads-based legislation today is based upon the notion of reducing or tackling the risk posed by various actions and behaviours (Gaventa, 2005). As Moran claims, there has been a "rise of the regulatory state" (Moran, 2001: 1) in which political control over behaviour has increased over recent decades. One of the principle difficulties associated with legislating against and policing the use of a developing technology such as the mobile

phone, however, is the ever-changing nature that such technology ensues combined with the contradictorily slow nature of legislation.

The government is expected to respond to risk in some way, despite the complexities in doing so, with statistical notions of risk providing a seemingly secure and unbiased basis on which to legislate and define legal or illegal behaviour. These notions of risk used in the form of legislative documents continue to be inadequate and the law an insufficient form of risk management. By its very nature, risk is a fluctuating possibility of the potential future results of a given action (Giddens, 2002) but legislation is fixed and slow in its response to such changing risk. During the interviews, police officers in particular recognised the slow nature of legislative change in comparison to the fast-paced change associated with developing technologies such as mobile phones that legislation is based upon:

“I don’t think anything is keeping up with technology, phones in general, I could go off on a tangent about that, but no, I don’t think it can keep up with phones and how they work, there’s social media, Facebook becomes old and all of a sudden, my step daughter, she’s 2 or 3, there’s social media down the line that I don’t even know exists and no, we don’t keep up with them anywhere near enough.” (PC Mike)

“Oh the law should be changing but it just takes time. It will never keep up with technology.” (PC Rob)

“The law is massively out of date. Technology advances far quickly than what we legislate for. I suppose that’s the nature of the beast. That’s kind of why we have police officer’s discretion.” (PC Sean)

Although expected to provide some form of risk management purpose, legislation is unable to successfully do that where it does not focus on risk in its entirety and most recent existence. Since the approval of mobile phone use while driving legislation in 2003, much technological innovation has taken place and the devices we once used to engage in conversation no longer only perform this function. The offence is therefore no longer simply the possibility of holding a phone to one's ear for a telephone conversation, as was the primary ability of mobile phones in 2003 (Agar, 2013). Nevertheless, legislation has not changed accordingly. The contradictory nature between the speed of technological change and risk development with governmental responses through risk-based legislation is exemplary of the postmodern condition.

The full extent of the offence and the possibilities for 'mobile phone use while driving' are unknown to both drivers and police officers with this ever-changing nature of technology. This creates complications for *legal* behaviour and the policing of what is safe and not. Those policing the offence recognised this, as well as the consequent difficulty in policing offences associated with technology on the roads. This inability for legislation to keep up with technology has resulted in human response to risk, which is often emotionally and subjectively driven (Zinn, 2008), as PC Sean, above, states. Police discretion may be used in such circumstances despite its lack of objective basis. As the law cannot keep up with risk, difficulties for policing risk on the roads are created. Rather than being that actuarial, statistical notion of risk that individuals strive to observe in order to maintain some element of ontological security (Giddens, 1991), social interpretation of risk and individual responses become prevalent. Legislation is unable to successfully provide this element of supposed security and stability that it potentially intended. Consequently, political response to risk may be seen as a risk in itself – risky to individuals as well those policing risk.

It is not only in this way, however, that the law may be seen as a method of risk proliferation. At least in part as a result of the complexity surrounding political responses to risk and legislation based upon risk, individuals have shown a difficulty in recognising those actions that are legal and not, as explored within chapter 3 of this thesis and repeated here in the following quotes from Kevin and Lucy:

“One thing I was staggered about was when the policeman [Crash Course presenter] told us that they considered the highway to be hedge-way to hedge-way. So if you’re parked in a layby with the engine running you can actually still get in trouble for using your mobile phone and I’ve done that countless times where I’ve pulled in a layby, and I always thought I was doing the right thing.” (Offender Kevin)

“I didn’t realise, I thought if you’re stopped you’re ok, so that was a big reality check for me, so since I’ve been on the course I’ve stopped using my phone like that. It [checking a handheld phone at traffic lights] wasn’t as bad as using your phone while you’re driving but it was still something.” (Employee Lucy)

As both course attendees suggest, there is little knowledge in the general driver population regarding what is and is not an offence, as that sometimes does not equate to what appears to be safe and not safe. The risk of the use of a mobile phone whilst stationary in a vehicle at the side of the road is likely similar whether the ignition is switched on or off, however, that is not reflected within the law. The ‘right thing’, as exclaimed by Kevin, is not always the ‘legal thing’ to do. Whilst Lucy was discussing mobile phone use in relation to being stopped at traffic lights, she still identified similar issues to those of Kevin, that a lack of knowledge surrounding the law stems from an individual judgment of risk and safety. Again, social and cultural existence of risk knowledge, as well as individual interpretations

of that, influence individual understandings of risk, as Douglas (1992) claimed. Risk cannot simply be understood in a vacuum of objective statistics that allow for firm conclusions to be made.

It becomes difficult for individuals to identify how they should behave on the roads, what is safe and what is legal. When using the law as that principle guide to behaviour, however, actions that have a potentially greater level of personal harm associated with risk may be exactly those that are supported. For example, rather than being legally allowed to write a text message whilst driving, individuals *are* allowed to dictate a message hands-free and listen to messages that are expressed by the device. As such, they are encouraged to adopt the legal alternatives that may actually fail to reduce any element of risk. (Strayer et al., 2015).

A chi-square test for independence showed that 71.3% of offenders who *did not* use a handheld mobile phone while driving at all over the six months prior to course attendance, *did* use a hands-free mobile phone over that same time period. Whilst those who are not willing to break the law may perceive that they are at a reduced risk from harm as a result of legal implications surrounding the behaviour, they may actually continue to be at risk due to their resorting to hands-free mobile phone use while driving as a supposed 'safer' alternative, according to the law.

What we cannot see *can* be easily ignored. The inability to clearly observe hands-free mobile phone use distraction clearly impacts upon individual perceptions of the behaviour, as does its legality. It becomes increasingly difficult for drivers to recognise what is legal and not, as well as what is safe and not. As the attraction of mobile phone use while driving continues to exist, or even strengthens with the developing nature of mobile phones, it is likely to continue to be adopted. Any motivation to cease using a mobile phone while driving decreases as the benefits

appear to outweigh the risks and the number of options available to drivers increases. Furthermore, the lack of visible distraction and apparent legal support for the use of hands-free devices only increases the likelihood that such behaviour will be adopted as an alternative to handheld mobile phone use, where possible, failing to remove the primary element of risk associated with the behaviour that initially necessitated legislation. In this way, the law itself can be seen as a risk as it encourages the adoption of risky behaviours as an alternative to other risky behaviours that are governed by legislation (Wells & Savigar, 2017). This also creates additional complexities for those policing the roads in their attempts to understand and police *risk*.

#### **10.4 Policing risk on the roads**

Similar to these difficulties in legislating against risk, the policing element of the criminal justice system is also fraught with complication when considered in terms of its expectation to police risk. The changing nature of technology (Giddens, 2002) and the malleable nature of risk (Beck, 2006) combine to create a complex environment of policing. Beck (1992) has suggested that a ‘boomerang effect’ is visible whereby risk has the potential to impact upon all (p. 37). Those policing the risk society would therefore not be expected to be immune to the complications associated with risk (in terms of knowledge, understanding and instability) as well as that risk itself. Existing as an individual who is expected to *govern* risk does not necessarily protect police officers *from* risk (associated with offending). This is also the case of the police force more widely, impacting upon how their work is conducted and individuals perceive their existence.

Throughout the interviews with police officers, a continued identification of the reduction in police force funding was observed (Johnston & Politowski, 2016). This reduction in funding was explored both in terms of the issues it has created for roads policing and the



satisfaction of the public who do appear to be concerned with the roads on which they spend a considerable proportion of their time every day. When asked about the role of roads policing officers, Daniel, below, described how the police force in which he worked no longer had a specific unit of employees that were expected to patrol the roads:

“Staffordshire haven’t technically got a roads policing unit, you know, they’ve got some lads on the motorbikes and they’re sort of proactive, or whatever they do, but they used to have a terrific traffic unit. I knew, they were looked on as being proactive and, you know, sort of, very good at what they do. Now you can go for miles and miles and not see a police car. Today up here there’s two cars out covering umpteen miles of motorway so people are gonna take chances because they know plod aint about.” (PC Daniel)

This quote not only explains the nature of roads policing within the county in question but the implications it has for those using the roads. Individuals *are* likely to perceive a reduced risk of prosecution with a visible lack of policing on the roads in which offending behaviour may take place. Where an increase in punishments is observed, as it recently has for the offence of using a mobile phone while driving (DfT, 2016c), the associated risk has supposedly increased. However, where the probability of detection reduces with that, no benefit will likely be converted from such attempts to reduce risk. Using a mobile phone while driving is a risk that people are willing to take when they know that policing is unable to be effectively used to render part of that risk (the risk of being caught) reality.

As an employee in the police force with a number of years’ experience in dealing with various aspects of policing, Tom was able to offer an informative and insightful understanding of how the policing of the roads is understood by members of the public and the impact that a reduction in funding has had upon both the police force and the public. The following three quotes from Tom all highlight these issues regarding reductions in

police funding and public priorities in terms of policing that are opposed to governmental and political importance:

“There is definitely, up and down the country, in every single force in England and Wales, less focus around road traffic legislation. It’s dropped down the dripping order, it’s not the kind of, the sexy side of what we’re doing. In terms of policing priorities, it’s definitely taken a backseat, and we’re no different.”  
(PC Tom)

“I was to say to you, that in Staffordshire we’ve got somebody going around whose killed 23 people in Staffordshire, what you gonna do about it? I can guarantee you Staffordshire Police would assemble itself entirely around catching that person... But 23 people died on our roads last year, do we give that the same priority that we would to a serial killer going around and killing 23... I don’t think the messages are being heard loud and proud by Central Government but the public actually care about these things.” (PC Tom)

“These are the things that people care about, the things that they want us to do stuff about. Yet, increasingly, the government don’t allow you to do it because they put very tough, very tough choices in front of Chief Constables who have to kind of make a balance between where do I put my eggs, where’s my greatest risk, where’s my greatest threat, my greatest threat is if people’s houses are being burgled because that’s very impactful.” (PC Tom)

Although Tom highlights a public concern for safety on the roads, those issues such as burglary that have a highly visible impact (in comparison to offences on the roads that do not result in a collision or personal harm) are given a higher priority. As the invisibility of the risk associated with hands-free mobile phone use while driving in comparison to handheld mobile phone use while driving has shown, it is easier to ignore the risk when it

cannot easily be observed. Where risk on the roads also does not have a physical outcome such as a collision, it is likely easier to ignore than the visibility of burglary or other similar offences. As previously mentioned, there is some element of 'tolerance' of such risk that can be easily ignored or can be compared to other actions/risks in such ways.

Where funding cuts are made, these highly visible areas of policing are more likely to be maintained than those of lesser visibility, particularly where those who distribute funding are expected to maintain a satisfied customer, such as in the case of PCC's and the public (Wells, 2016). Consequently, roads policing itself has become a victim of the risk society when experienced in times of austerity. Even where the consequences of risk on the road do result in death and injury, the policing of the roads appears to have been given a lesser priority than other areas of risk policing where such severe consequences often result. Tom suggests that it is government and political attitudes, rather than public, towards such actions that have reduced a concern with risk on the roads. Supporting Garland's (2003) claim that the government have become expected to be experts in risk, Tom highlights the importance of the government in the role of understanding and therefore funding roads policing. Unfortunately, however, that expertise appears insufficient as the risk of the roads continues to exist.

Furthermore, developments in technology and a recognition of what is and is not risky, combined with contradictory advice from various sources have the potential to make policing risk complex and challenging. Still, police officers are expected to continue their role in reducing risk by identifying offenders and as such are expected to hold a firm understanding of that risk and its associated legislation. The complication regarding an understanding of what the offence of 'using a mobile phone while driving' constitutes was described throughout the interviews with police officers as not being limited to the general driver population only. When asked about more recent technologies or the touching of a hands-free device, even police officers with experience of roads policing were unclear as to what constituted an offence:

“Yeah, so even if you touch it [a device in a holder], good question [laughs], is the offence committed of driving whilst using your mobile phone? I believe it is because you're not connected to a hands free system. Yeah, so if you're making a call while it's in a holder, to me, I will, I need to check this with my mate [laughs], the offence is committed, because I'm sure the legislation states about approved hands free device, and a holder is not an approved hands free device, to me.” (PC Rob)

The element of uncertainty surrounding the offence creates a need for some interpretation and subjectivity in enforcing the associated legislation, which becomes problematic for those 'being policed' as well as those policing behaviour. The above quote shows how the ambiguity within the offence translates into ambiguity within policing. The police officer claimed that the use of a mobile phone in a holder did constitute an offence, but showed no certainty in stating that and ended the above quote by suggesting that is his own opinion on the offence, rather than any definite guide to policing or behaviour.

Recognising legal and illegal behaviour is not as simple as it may initially appear to be, or as one would expect the law to be. That the legislation surrounding the offence is so uncertain that actions cannot simply be deemed legal or illegal highlights concerns. For some behaviours there are clearly defined categories of handheld and hands-free mobile phone use, legal and illegal mobile phone use. There are, however, an increasing number of actions that fall within a grey area in between those two categories. With a consideration of hands-free mobile phone use, this understanding becomes even more complex. A number of police officers identified this, including John, below:

“Looking at your hands free, it depends really because stuff that's built in

when you've got your Bluetooth on your phone synced in to your radio and then you've got literally the one button to press on and one button to press off, I mean they deem that, obviously its legal isn't it because you find it in plenty of cars." (PC John)

Not only does the visible existence of distraction influence perceptions of risk and legality, manufacturer developments and their widespread existence does also. That such devices are frequently provided within vehicles suggests that they are both legal and safe, making it easier to justify their use. Vehicle top speeds, for example, allow drivers to exceed the national speed limit but as it is *allowed* by manufacturers, justification for its use becomes easier to find and acceptance of their presence is observed (Corbett, 2000). Manufacturers in this way are seen as experts that can be relied upon, although that does not necessarily relate to safety.

Similarly, the use of mobile phones for actions that can also be adopted using technologies that are manufactured for in-vehicle usage is not always recognised as consisting of an offence. PC Sean, below, describes himself as not committing an offence in his use of a handheld device within a cradle as a satellite navigation system, despite the above quote from PC Rob identifying it as an offence. This highlights the uncertainty and discrepancy in understanding what *is* an offence:

"I myself would use my phone as a satnav, it's my primary satnav device, it sits in a cradle in my windscreen, you know, swipe away, or if you have an issue with it I might, you know, try and rectify it by touching the screen. Is it using my phone? No, it's not using my phone, if I was pulled over, I would probably argue the point with I'm using my phone as a satnav, but yeah, whether it's in a cradle and someone was using it, I wouldn't perhaps look at it reporting for using a mobile phone whilst driving, I'd do other offences that

might be more applicable, you know, I've pulled people who are watching films, you know, watching films while their phone is in a cradle, so there are other offences that you can do them for.” (PC Sean)

In contrast to this, when asked about the offence, Nathan did identify the use of a mobile phone as a satellite navigation system as an offence of using a mobile phone while driving:

“The legislation is around basically as it says on the tin, it's using a mobile phone while driving so that that could be, as you would think, using it to speak on the phone but it could also be texting, it could also be, you know in this day and age, it could be smartphones, checking Facebook or even checking a GPS, that constitutes using a mobile phone while driving, of which I've stopped... the perception certainly seems to be that if they're holding it to their ear then they're committing an offence but if they're holding it there up to the window maybe they don't, however, that is not the case. If you are using your mobile phone in whatever form, be it texting, be it using the Internet, be it for a call, then you do commit the offence.” (PC Nathan)

Not only do police officers show a level of uncertainty regarding the offence of using a mobile phone while driving, but they also adopt those behaviours that other drivers have been stopped by officers for performing and other officers still do perceive to be an offence (see Lee below). This inconsistency with policing can have a considerable impact upon the perceived fairness of an interaction with the police<sup>55</sup> and reduce the level of compliance with such legislation (Tyler, 2004).

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<sup>55</sup> This will be discussed in great detail in chapter 12.

Whilst O'Malley (2010) claims that individuals have become more risk conscious, the largely invisible nature of risk in terms of the roads environment and the use of a mobile phone while driving allows individuals to avoid, ignore and/or be blind to the existence of risk, particularly when considering the nature of the risk when those actions are performed by themselves. This is the case for both police officers that are expected to police risk *and* the general driver population, as the following quote from Lee shows:

“I mean this is where I get really pissed off because I was using my phone as a map, you know, for traffic directions, so it was actually on the passenger seat next to me... I wasn't using my mobile phone to make a phone call or send a text message, I was actually using it as a, which is what you can do, I was using it as a sat nav.” (Offender Lee)

Lee believed that his mobile phone use behaviour *was* legal. In using it *as* a device that *can* be legally used whilst driving, he described a level of anger with his experience with the police. The difficulties associated with policing the risk of technology in particular are evident here. Being stopped for committing an offence that a driver is unaware constitutes an offence only adds to the highly emotional experience and increases the likelihood that such an encounter will be met with resistance and perceived unfairness, creating further difficulties in the policing of risk-based legislation.

This contradiction between safety and legality discussed by Lee highlights one of the major issues with legislating according to risk. For some, attempts to act according to what is *safe* are not enough to avoid police attention and ensure the maintenance of

one's law-abiding identity. For others, attempts to act according to what is legal are not enough. Furthermore, the mobile phone is increasingly capable of performing those functions of various technologies that have existed for longer periods of time, although often in a way that differs to that initially proposed (Agar, 2013). However, when used through the mobile phone device they may constitute the offence of 'using a mobile phone while driving' despite their legal application in other technologies.

If such professionals are unable to identify specifically those behaviours that constitute a mobile phone offence then it becomes easy to understand how the general driver population also cannot always appreciate whether or not certain behaviours are against the law, supporting those critical analyses described within chapter 3. This creates not only complications for drivers but also those policing the roads, and consequently does not result in a simple development of legislation, enforcement of legislation and adherence to legislation, as was likely anticipated upon initial development of the offence.

### **10.5 Expertise in the safe use of mobile phones whilst driving**

As discussed in the previous chapter, much of the difficulty in recognising how individuals should behave on the roads is a result of the competing and contradictory expert advice made available from various individuals claiming access to 'the truth' (Beck et al., 1994: 79). Alongside this demonopolisation of expertise, Beck also highlights the nature of individualisation, through which individuals have become expected to take responsibility for their own actions rather than having a group-based sense of care (Beck, 1996). This links closely to governmentality approaches to risk that highlight the importance of the individual in understanding risk and making behavioural choices. Whilst individuals may obtain information from a range of



experts, they are ultimately expected to make their own informed decisions about how to behave on the roads. In this sense, the mass existence of experts is contrasted with the individual nature of behavioural choice. Thus, decisions regarding how to behave on the roads in terms of mobile phone use while driving have been influenced by a range of factors, including the existence of various experts, identification with particular social groups and an individual's behavioural choice.

In support of both Beck's (1992) and Giddens' (1999) claims that individuals are now exposed to a range of experts in a single given area of expertise, throughout the interviews conducted as part of this thesis, offenders were able to identify various pieces of information on which they based their knowledge and understanding of road user safety. Much of this information came from their own knowledge of the law but also government educational attempts to enhance road safety awareness. In discussion of such information, both Jean and Kevin highlighted how they had observed the use of government education as an expert guide to behaviour, however that education was able to be largely ignored as it failed to be internalised and influence driver behaviour:

“It's really silly because I've seen loads of adverts with the crash test dummies and all kinds of things about not wearing your seatbelt and it had never really triggered with me until I went to the crash Course.” (Offender Jean)

“You drive down a lot of roads now that have got signage on them that says ‘high risk route, three collisions, three deaths in the last year’, you see those sorts of signs as you're going down the country, and you actually don't really think about it, you think, ‘there must be a million cars that have been down this road in the last three years, that's quite good odds’.”  
(Offender Kevin)

Jean identified an apparent ignorance to the information being presented through this expert form of media campaign. The presentation of such information in that way, even though through such an expert, could be and was largely ignored. Kevin, on the other hand, explains how, further than simply ignoring such educational information, he was able to interpret that expert advice in a manner that allowed his own perceived expertise to be of greater importance and relevance, and therefore his offending behaviour to be continued. For him, the risk associated with speeding could be compared to the probability of experiencing the associated consequences that were being highlighted through this form of educational expertise. This highlights how social, cultural and individual interpretations of risk and expert information are central to individual behaviour on the roads. Even firm, statistically based information cannot successfully be simply internalised and used to guide behaviour on the roads.

In addition to this educational expert advice, various media outlets and manufacturer advertisements also provide 'expert' risk information in relation to the roads. Vehicle manufacturers describe hands-free mobile phone use as a safer and legal alternative. Volkswagen claim that their in-car hands-free mobile phone technology allows drivers to "make hands-free calls, safely and easily, while you're driving." (Volkswagen, n.d: 1). Such devices are promoted as "help[ing] drivers focus on the road" (Bluetooth.com, n.d: 1) and "avoid the penalties and drive safe" (Halfords, n.d: 1). Although there are various meanings for the term 'safe' within the roads environment (for example, one can be safe from collision or safe from prosecution), the suggestion being made here is that hands-free mobile phone use while driving is the safe alternative to handheld use. This information suggesting the legal and therefore safe nature of hands-free mobile phone use while driving is some of the most easily accessible with regards to the offence and does not assist in attempts to improve road safety behaviour when considering that hands-free mobile phone use has been found to be equally as dangerous as handheld mobile phone use (White et al., 2010).

Not only were notions of a varied expert existence frequently highlighted throughout the interviews but also ideas of what it takes to be considered an expert were suggested. Crash Course attendees discussed an importance of proving one's 'expert status' in terms of Crash Course presenters and their credentials in the field of road safety. When asked what they remembered about the course or what stood out to them, Jean and Michelle suggested that the expert statuses of the presenters validating the information presented within the course:

“I appreciated the fact that the three people who delivered it had all suffered through either their own driving or somebody else's driving so that was, that sort of really brought it home. They knew what they were talking about... to have those people, I think that's what speaks so much, their experiences, that it's not just them doing it because that's what they've learnt and they're telling other people, it's because they know because of their experience.” (Offender Jean)

“Mainly it was listening to the people telling you about their experiences and witnessing first hand, even now, professional people, the effect it has on them.” (Offender Michelle)

Clearly, experience is of great importance in the defined expert status of individuals, both police officers and Crash Course presenters. Due to their experience with the consequences of road risk, both of the above offenders suggest that the course presenters have a level of expertise that creates a sense of professionalism and therefore enhances the likelihood of the information they are presenting being used by course attendees in a way that may improve their driver behaviour.

The expert status of the presenters likely enhances the perceived benefit of the course – it was described as more effective than the National Driver Offender Retraining Scheme, and Speed Awareness Courses in particular by a number of interviewees, as shown in part two

of this thesis. Crash Course presenters have physical, personal experience with the issues that they are discussing and are encouraging course attendees to refrain from. In contrast, those presenting the information within the NDORS courses do not have such personal experiences. They are generally qualified driving instructors that discuss possibilities rather than experiences (NDORS, n.d). That qualified status, however, does not necessarily give them expertise in all of the information that is discussed within an educational course and lowers the validity of both the information being presented and the level of expert status they are assigned.

These issues surrounding expertise, trust and belief in the knowledge of others further competes with individual perceptions of themselves as expert. As Beck (1992; 2009) discussed the nature in which individuals are able to become expert providing that they offer a particular amount of time or effort to a given subject, individuals may apply that to their own understanding and therefore use of the roads environment.

Data analyses were conducted to examine this notion of personal expertise using questionnaire data concerning perceived personal safety associated with offending actions<sup>56</sup> and miles driven annually (as a proxy for 'expertise'). A one-way ANOVA was conducted to explore the impact of annual mileage on perceptions of personal safety for offending behaviours. Annual mileage was computed into a variable consisting of four categories; 0-5,000 miles, 5,001-10,000 miles, 10,001-15,000 miles, and 15,001 miles and above. There was a statistically significant difference in perceived safety scores for the four mileage groups:  $F(3, 749) = 7.31, p = <.00$ . Despite this statistical significance, only a small eta squared effect size of .03 was calculated. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for group 1 ( $M = 9.04, SD = 3.60$ ) was significantly different from group 4 ( $M = 10.60, SD = 3.61$ ). The mean score for group 2 ( $M = 10.60,$

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<sup>56</sup> A continuous variable was computed combining perceived safety when using a handheld mobile phone while driving, exceeding the speed limit, drink driving and not wearing a seatbelt.

$SD = 3.61$ ) was also significantly different from group 4. Thus, there is a significant difference in perceived safety between lower and higher mileage drivers, with higher mileage drivers showing a higher mean perceived personal safety than lower mileage drivers.

This higher perception of safety for higher mileage drivers supports the proposed notion of the development of a 'personal expertise' within the roads environment, based upon the amount of time spent and daily experience in using the roads. This supports Beck's (1992) proposition that we can all become 'expert' in a society overwhelmed by experts (p. 29), or at least it is possible that individuals believe they have some qualification to become expert and guide their own behaviour.

Throughout the interviews, when asked about their behaviour on the roads, both offender and employee course attendees generally referred to their 'safe' nature as drivers and the way in which they were able to avoid the 'consequences' of road risk. When their perceived safety was queried, their ability to avoid those consequences such as fines or collisions alongside 'experience' of driving was often presented as confirmation of their 'safe' road user status, as the below interviewees highlight:

"I'm a very calm driver, I tend to stick to the speed limits... yeah, well I've drove a van for 7 years without having any kind of accident or didn't get any single speeding ticket or whatever, so generally pretty safe." (Offender Mark)

"I've probably been to the moon and back four times with the equivalent mileage over my lifetime, so yeah I feel confident." (Offender Kevin)

"I think I feel pretty safe, erm, I think I'm a pretty good driver and I've got

a pretty good record.” (Employee Matt)

This description of himself as a safe driver was despite Mark having been caught committing the offence of using a mobile phone while driving and attending a driver education course for that offence. His safety on the roads was described through those actions that had instead never been called into question or been used to query one’s law-abiding identity. Similarly, Zara discussed her attendance at a speed awareness course but justified that by describing the nature in which a number of individuals were ‘caught out’ at the same time, rather than it being any reflection on her driver safety. The otherwise generally law-abiding nature of her behaviour was used as a means of highlighting her safety on the roads. Matt also highlights the nature in which his ‘pretty good record’ could be used to define him as a ‘pretty good driver’, with no mention of the actions that had prevented this description of ‘good driver’ from being ‘perfect’ or ‘extremely good’.

Whilst Beck (1992) highlights the demonopolisation of expertise as allowing individuals to themselves become expert through a given amount of time and effort afforded to a given subject, these interviewees do highlight almost an expert status in their experience as drivers. For the above interviewees, the amount of time and experience that they have obtained from being a driver for a number of years *does* appear to add to their claim to personal expertise. That they describe themselves as ‘good’, ‘confident’, or ‘safe’ further highlights their ability to claim this expert status, or at least have the ability to guide their own behaviour on the roads, whether or not that is in line with ‘expert’ information presented through the law.

Multiple regression analyses were conducted to explore this possibility further in relation to individual understandings of personal and general levels of risk and their relation to

driver behaviour. In terms of model development, perceptions of general crash risk, or the likelihood that risky driver behaviours increase the risk of a driver being involved in a crash, created one model variable whilst the other concerned personal safety, or how safe an individual would feel performing those same actions<sup>57</sup>. These two variables were considered in their ability to predict driver behaviour<sup>58</sup>. Together, the variables accounted for 25.5% of the variance in driver behaviour,  $R^2 = .26$ ,  $F(2, 895) = 153.43$   $p < .001$ , although it was only perceptions of one's own safety that was significant in contributing to this explanation ( $\beta = .50$ ,  $p < .001$ ). The perceived safety of others did not add any significant value to the model ( $\beta = .00$ ,  $p > .05$ ). Of the two forms of risk perception, it was perception of one's own safety that was better able to explain risky driver behaviour than perceptions of a general crash risk. Still, together, these two variables explain a considerable proportion of the variance in driver behaviour. This suggests that a 'self-appraisal strategy' is evident whereby individual behaviour is somewhat influenced by perceptions of one's own safety, or risk.

Thus, individuals continue to perceive themselves as central to an understanding of risk and how they should behave according to notions of risk. It remains central, therefore, to recognise how these individual and social perceptions of one's own risk may override any actuarial, statistical notions of risk. Attempts to increase an understanding of risk or control for risk through legislation, or even education, are likely to prove unsuccessful if they fail to adequately tackle the importance of the individual in defining their own safety. As the previous chapter outlined, there are a range of actions that an individual may perform to ensure that they are not defined as 'the risk', and this may develop somewhat, or assist in the development of, an ability to self-appraise risk or to 'become expert'.

The importance of identity, particularly that of the law-abiding, respectable individual, likely further explains the importance of the self or each individual in

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<sup>57</sup> These statistics relate to questionnaire data collected prior to attending Crash Course.

<sup>58</sup> Those same behaviours that were questioned in terms of general risk and personal safety.

defining and understanding risk. When individuals had been identified as offenders by police officers, a response to rationalise that behaviour was often provided, with a frequent claim that it is not a behaviour that these individuals would normally perform. It was out of the ordinary in their generally respectable, law-abiding existence. In discussion of their behaviour that led to their attendance at Crash Course, both Rachel and Debbie, below, highlight their offending behaviour as abnormal and deviant from their general driver behaviour:

“It’s not something I would normally do because I’ve got a hands-free kit.

(Offender Rachel)

“[I] never use my mobile phone while driving generally speaking. I have a hands free kit so I don’t ever hold it to my face usually.” (Offender Debbie)

After acknowledging oneself as safe in all other respects on the roads, and elsewhere, individuals are able to describe the behaviour that questioned their law-abiding status as infrequent and not defining their identity under ‘normal’ circumstances. As such, their identity should not be based upon that single action but on those more frequently existing actions that define them as safe and hard-working, respectable individuals.

Lupton’s (2006) suggestion that individuals must ‘work’ to maintain their identity as a ‘good citizen’ within a society overly concerned with risk (p. 14) appears supported here. Crash Course attendees frequently ‘worked’ on their description of themselves as safe, reliable and law-abiding by describing those elements of their behaviour throughout the interviews. This was often despite the interview surrounding their attendance at an educational course that resulted from their offending behaviour.



Even within these given circumstances, individuals make attempts to reconceptualise their actions and redefine themselves through a focus upon their most successful and frequently performed actions on the road as 'proof' of that identity they are attempting to uphold.

As part of this process of personal appraisal as a response to road risk, individuals may also compare their own behaviour to that of other drivers and other risky actions. As well as indicating their nature as a safe driver, this comparison allows individuals to further enhance the perceived safety of their own actions. Throughout the interviews, police officers often identified how individuals frequently highlight the 'worse' offending behaviour of other individuals, as the following quotes highlight:

"Most people see it as a minor, a minor offence compared to what the police service delivers as a whole, i.e., dealing with more serious matters, i.e., murders or manslaughter or serious sexual offences, and that is probably one of the most common things they will say, 'why are you not dealing with something more important?'" (PC Rob).

"Have you got nothing better to do than target, you know, innocent motorists?" (PC Tom)

The risk associated with offences such as mobile phone use while driving is not deemed high enough to warrant police attention and question one's law abiding identity – at least when considered in terms of oneself rather than other drivers. It is those other drivers that are committing potentially more serious offences with potentially more serious outcomes that are deemed worthy of police attention.

In this way, individuals appear to be using methods of neutralisation to reduce the focus upon their own offending behaviour. In support of Sykes and Matza's (1959) suggested techniques of neutralization, individuals appear to suggest a denial of injury here. There are clearly more significant acts of crime that have associated physical consequences, such as murder, whereby harm has resulted from the action performed and the offence committed. In such cases, the purpose and necessity of policing can indeed be seen. In comparison, traffic offences such as handheld mobile phone use while driving that do not have any visible victim or do not result in any known harm are not equally as worthy of police attention - it is difficult to demonstrate the value of work that involves the prevention of harm.

The traffic offender is therefore able to reduce any emotions of guilt or shame associated with offending behaviour in their claim that there are offenders much more worthy of police attention and offences that actually do and have resulted in the visible presence of a victim who has experienced harm as a result of the behaviour. The nature in which risk is used as a method of behavioural control through legislation on the roads does not necessitate that any harm or victim is needed for an offence to have been committed. However, this has clear implications for the self-beliefs and justifications associated with such behaviours on the roads. Where risk is taken but there are no physical implications, the behaviour associated with such risk may frequently be continued as a result of these techniques of neutralisation. This has implications for attempts to legislate against risk and police the roads as individuals are unlikely to cease behaving in such a way when their internal cognitions allow for a justification through this process of neutralisation.

Increasing the penalties associated with the offence, as has been observed of the offence of using a mobile phone while driving, would consequently fail to have any real benefit for offending behaviour as this cognitive process continues to be possible. Education, however, would allow for an attempted focus upon such cognitive processes and could attempt to provide some form of barrier to these neutralisation thought processes. It is essential that responses to risk on the roads are provided with a consideration of academic research that identifies such complications with the legal system as it stands.

## **10.6 Summary**

Manufactured developments have influenced risk on the roads, with the use of a mobile phone existing as simply one example of this. Although attempts have been made to understand how mobile phone use while driving poses a risk, and indeed individuals show a considerable awareness that its use *does* have potential consequences for road safety, hands-free mobile phone use while driving is more complex. Individuals show a lesser awareness of the risk associated with hands-free devices, with the invisibility of the cognitive distraction and lack of political involvement with its existence adding to this.

Whilst the law might be expected to be 'expert' and informative in explaining where risk exists, it fails to do so in the case of hands-free mobile phone use while driving. Thus, individuals, including police officers, adopt the behaviour as a perceived safer alternative to handheld mobile phone use. Indeed, the action is safer for those considering risk *from prosecution*, where handheld mobile phone use is clearly the riskier alternative, but is not necessarily so when considering risk from harm (Patten et al., 2004; Strayer et al., 2015). Thus, the law may actually be increasing the

likelihood of the adoption of 'alternative risks' as it encourages hands-free mobile phone use behaviours.

Alongside a reduction in the physical presence of police officers, multiple forms of expertise have developed whereby a range of expert advice has been made available to the driver population. The massification of risk expertise has allowed individuals themselves to become 'experts' in the field of road safety. There does appear to be a distorted view of risk on the roads, reinforcing the importance of understanding cultural, and more importantly, individual notions of risk. Whilst the behaviour of other drivers may act as a comparison, individuals more likely rely on an understanding of the risk they pose in guiding their behaviour. This is problematic when those individuals perceive their own behaviour as more safe and less risky than that of other drivers. The existence of risk on the roads through the use of mobile phones while driving is unlikely to reduce significantly without consideration of this range of processes that influence perceptions of risk and subsequent behaviour on the roads.

## **Chapter 11: Fairness and legitimacy in a policing context**

### **11.1 Introduction**

With a critical focus on self-interest and self-regulation, or instrumental and normative compliance (Tyler & Fagan, 2008), this chapter will begin with an exploration of research that has been used in an attempt to understand how and why individuals comply with the law. The use of legislation and policing as behavioural regulation will be examined in terms of their link to moral, fair and just bases. The chapter will continue to critically explore notions of procedural justice within the context of roads policing. In particular, Tyler's (1988; 2006) framework of the importance of 'voice', 'neutrality', 'trustworthiness' and 'respect' in generating 'procedural justice' – the fairness associated with processes that lead to outcomes (Tyler, 1988) – will be used to explore compliance with the law.

Mobile phone use while driving is a particularly interesting case for exploring these notions of compliance in its existence as *mala prohibita* law, or one that is 'wrong' simply as a result of its legal prohibition rather than any intent moral basis (Wells, 2012: 106). A number of issues and implications in terms of both the procedures and the outcomes surrounding interactions between the police and the public relating to the offence of using a mobile phone while driving will be discussed. These will be considered in relation of their existence as a result of uncertainty and an understanding of the moral basis of the law, with implications for both identity and law-abiding behaviour.

### **11.2 Why comply?**

Whilst interest in compliance in the field of criminology has largely focused upon how, why and when individuals fail to comply with the law, it is essential to also explore those experiences of *law-abidingness* that our society relies upon in pursuit of a smooth, working social order (Hough & Maffei, 2013). Dispute resolution and legislative formulation have

no worth if individuals within society do not largely adhere to their suggestions and requests for action. They are premised on the notion that the majority of the population is willing to comply with their suggestions (Tyler, 2006).

Tyler and Fagan (2008) distinguish between an instrumental, or social control, model of compliance, and a legitimacy, or social norms model (since referred to as the normative model). Within the instrumental model of compliance, individuals are motivated by self-interest and behave according to the law due to a fear of being punished if they do not (p. 233). In contrast, the legitimacy, or normative, model of compliance involves *self-regulation* whereby individuals comply of a voluntary nature according to moral beliefs and a notion that the authority has the 'right' to dictate behaviour (p. 236). Whilst these two concepts both relate to the notion of compliance, or adhering to a suggested state of being, they are not equal in the behaviour that they encourage, as the following quote from Tyler highlights:

"According to a normative perspective, people who respond to the moral appropriateness of different laws may (for example) use drugs or engage in illegal sexual practices, feeling that these crimes are not immoral, but at the same time will refrain from stealing. Similarly, if they regard legal authorities as more legitimate, they are less likely to break any laws, for they will believe that they ought to follow all of them, regardless of the potential for punishment. On the other hand, people who make instrumental decisions about complying with various laws will have their degree of compliance dictated by their estimate of the likelihood that they will be punished if they do not comply. They may exceed the speed limit, thinking that the likelihood of being caught for speeding is low, but not rob a bank, thinking that the likelihood of being caught is higher." (Tyler, 2006: 4).

Whilst individuals may adhere to *some* laws, exhibiting a form of compliance, they may not necessarily adhere to *all* laws following that same principle. In this normative manner, a personal moral belief to engage in law-abiding behaviour is not universal but depends on individual interpretations of the moral underpinning of that law and behaviour. Simultaneously, whilst individuals may perceive the likelihood of detection and punishment of one action prohibited by law as relatively high that of other actions may be relatively low. In this instrumental manner, personal interpretation is again central, with individuals able to perceive a varying likelihood of punishment and therefore deterrence to offending behaviour.

Instrumental compliance as a method of behavioural control relies upon the use of sanctions and penalties in an attempt to reduce the likelihood of non-compliance. It is focused upon punishment and a presumption of rational decision-making (Hough et al., 2010). The cost of a given behaviour must outweigh its benefits in order for it to be less likely to be adopted (Tyler & Huo, 2002). Utilising such a concept within the criminal justice system, it is anticipated that an increase in the penalties and likelihood of detection associated with an offence would reduce the likelihood of performing that action and therefore increase compliance (Jackson et al., 2012a). According to the model of instrumental compliance, it is the effectiveness of the police in their abilities to regulate crime, provide a credible risk of detection and sanction when crime is committed, and ensure a fair distribution in police services between social groups that define a successful police force (Sunshine & Tyler, 2003).

In contrast, normative compliance is more closely linked to individual belief, fair treatment, fewer penalties and an overall sense of greater optimism for inducing compliance (Bradford et al., 2015). It can be understood as a moral duty, or personal belief that the law should be adhered to because “it is the right thing to do” (Jackson et al., 2012a: 2). Individuals must believe that an action being recommended is the morally reasonable way to behave and that those recommending such action have the responsibility to do so fairly in order for

compliance to be sought in this way. Normative compliance in this sense has been described by Tyler and Huo (2002: 82) as ‘acceptance’, rather than ‘compliance’ (which exists in the form of instrumental compliance), as it necessitates a voluntary desire to behave in a particular way rather than any forced obligation to act in that way.

Tyler (2006) claims that this normative compliance is generally well achieved through the existence of legitimacy within the legal system and those policing behaviour; police legitimacy refers to “the belief that the police are entitled to call upon the public to follow the law and help combat crime and that members of the public have an obligation to engage in cooperative behaviours” (Tyler, 2004: 86-87). Individuals may look to a sense of fairness in the legal treatment of individuals within society in order to recognise the moral appropriateness of the actions they propose and prohibit (Hough et al., 2013).

In this way, identification with the police is a factor central to normative compliance, emphasising the importance of the procedures within police-public interaction. Brockner and Wiesenfeld (1996) have claimed that to be trusted, the police must show that they are both fair in their behaviour and can be relied upon in providing fair treatment. To be perceived as legitimate, the police must show that they can be relied upon in following the law and combatting crime (Tyler, 2004). According to Tajfel and Turner (1979), social identity is central to group behaviour, with the beliefs, norms and actions of both those within one’s social group and outside of one’s social group influencing one’s own attitudes and behaviours. This can be applied to the context of policing - if the police are seen to have shared beliefs with the public then they are more likely to be seen as part of that social group, rather than an out-group that does not identify with the public. Subsequently, their actions may be more likely to be supported and their suggestions for behaviour more likely to be agreed with (Tyler & Blader, 2000). Normative compliance may therefore be defined somewhat by police behaviour.



### **11.3 The success (or otherwise) of instrumental and normative compliance**

The difficulty in encouraging behaviour in accordance with instrumental compliance is that self-interest of a rational individual does not always equate to law-abiding behaviour (Tyler & Fagan, 2008). For some individuals, under certain circumstances, the most beneficial behaviour will not be of a law-abiding nature. As the above quote from Tyler highlights, where behaviours such as exceeding the speed limit appear to have benefits for an individual and the likelihood of detection remains low, the behaviour becomes increasingly in the self-interest of that individual, despite its unlawful nature.

Furthermore, instrumental compliance relies on the monitoring and policing of behaviour. All behaviour cannot be monitored all of the time (despite the promises of technology, surveillance and big data). This would be both a timely and costly process that the police service under the current economic climate simply could not provide (Johnston & Politowski, 2016; AA, 2017). A reliance upon instrumental compliance in such times of austerity is only likely to fail increasingly, with the potential for crime rates to increase as the likelihood of receiving sanctions for offences decreases and the policing of offences is overwhelmed (Tyler & Huo, 2002). Consequently, it is difficult to ensure law-abiding behaviour simply through the use of penalties, sanctions and the risk of punishment in this way. In addition to this, instrumental compliance does not necessarily elicit connections with the police that encourage cooperation beyond compliance with the law, for example, in working with communities to reduce crime or identify offenders (Tyler, 2004). Voluntary compliance and cooperation in this way is less likely to develop through an instrumental model.

Normative compliance too has been critiqued and is, in some ways, limited in its ability to encourage legal behaviour. Trust, legitimacy, group identity and cooperation have been closely linked to normative forms of compliance. However, they are often not developed with simplicity, particularly for certain social groups for which trust has proven difficult to

develop. For some of these groups, a shared social identity is difficult to develop between the police and the public as individual identities differ so vastly between communities (Murphy et al., 2015). Priorities for policing also vary between ethnic groups, with some groups relying on an instrumental model of compliance and expecting less in terms of the procedures associated with police-public interaction (Sargeant et al., 2013). Murphy and Cherney (2012) claimed that for those groups who perceive an illegitimacy of the law, interaction with the police is reduced and the justice associated with procedures has little impact upon perceptions of the police – if their work and beliefs are deemed illegitimate, the procedures associated with them are unable to make up for that, as will be discussed later.

Still, normative compliance is beneficial in a number of ways, not least due to its economic viability and situational stability (Tyler, 2009) – it allows for the acceptance of laws and other means of governing behaviour that do not necessarily require the physical presence of police officers and other authority figures. The threat of punishment is not always necessary when individuals perceive themselves to have a moral obligation and therefore physical desire to act in a particular way. Consequently, a high police presence or continued necessity for punishment (or at least the threat thereof) is not needed to ensure legal behaviour as it is with instrumental compliance. In addition to this, those actions that are not necessarily against the law but represent some element of danger could be tackled through normative compliance, where they could not through instrumental compliance. This has the potential to reduce a reliance upon the law and the limitations associated with legal processes.

#### **11.4 Encouraging normative compliance**

In 1988 a seminal piece of work was published in which Tyler found that procedural elements of an interaction with legal professionals were of considerable influence upon one's overall perceived fairness of the interaction, with fairness judgments being the most

significant factor influencing satisfaction. Procedural justice, perceptions of fairness in decision-making and treatment within interactions (Tyler, 1988), were found to be consistently more important in experiences within legal circumstances than distributive justice - procedures were more important than outcomes.

Expanding upon the work of Thibaut and Walker (1975) and Leventhal (1980), Tyler (1988) described seven primary contributory factors that could explain perceived fairness in an interaction between the police and the public. These were: motivation of fairness, honesty, ethicality, possibilities for representation, quality of decision-making, opportunities for correction, and unbiased behaviour. Of these suggested influences, ethicality, honesty and attempts to act with fairness were the most significant and important in relation to the perceived fairness of legal processes (Tyler, 1988). Through various explorations of the fairness of procedures, Tyler has identified a causal process of procedural justice, whereby the justice associated with criminal justice procedures has the ability to enhance confidence in the perceived legitimacy of institutions and can encourage compliance with the law (Tyler & Sunshine, 2003; Tyler & Fagan, 2008).

Linking police procedure to public cooperation, fairness and legitimacy have been described as central to both notions of procedural justice and normative compliance with the law (Tyler & Huo, 2002; Robinson & Darley, 2004; Tyler & Fagan, 2008). In an exploration of procedural justice within a policing context, Hinds and Murphy (2007) found that when individuals believed that the police acted in a procedurally just manner, they were more likely to state that the police were a legitimate organisation and were more satisfied with their work. Moving beyond this consideration of police fairness and satisfaction, Sunshine and Tyler (2003) found crucially that perceptions of police legitimacy influenced *compliance* with the law, cooperation with the police *and* public empowerment of police work. Legitimacy was found to be the most significant influence upon each of these variables. This has implications not only for police-public interactions

but also the ways in which funding is utilised, police time is spent and how voluntary compliance can be encouraged from members of the public.

In terms of the personal experiences with the legal system that have the potential to influence perceptions of procedural justice, both voluntary and non-voluntary, or citizen-initiated and police-initiated, experiences with the police have been found to be influential (Hinds, 2009). When questioned about their most recent experience with the police, Skogan (2005) found that individuals rated police satisfaction based largely on politeness, fairness, helpfulness and attentiveness. As repeated later by Murphy (2009) and Avdija (2010), satisfaction with the police was consistently higher for those citizens who had initiated police contact rather than receiving police-initiated contact. Interactions between the police and the public that are not initiated by members of the public have the potential to negatively influence attitudes towards the police if not conducted in line with those notions of fairness and legitimacy.

This is one such conclusion made by Murphy (2009) in her study of procedural justice in Australian police-public interactions. She found that in those interactions between the police and the public that were initiated by the public, police performance was the greatest influence over the perceived level of satisfaction with the process. For those that were initiated by the police, it was procedural justice that had the greatest influence over satisfaction with the police. It is possible that such encounters require additional effort to ensure a perceived fairness, legitimacy, helpfulness, trust and respect due to the nature of their existence as unsolicited from individuals but forced upon them by the police.

In an acknowledgement of influences upon public perceptions of the police for those who have not necessarily had any direct contact with the police, Rosenbaum et al. (2005) explored notions of vicarious police experience and its influence upon procedural justice. Individuals received information regarding the police in their daily lives that had the potential to influence perceptions of their legitimacy, fairness and justness. The most

frequent source was from another individual who had a personal encounter with the police, with the media also playing a considerable role in vicarious experiences with the police.

Rosenbaum et al. found that, as expected, negative vicarious experiences were associated with negative perceptions of the police and positive vicarious experiences were associated with positive perceptions of the police. However, contrary to the hypotheses made by Rosenbaum et al., those positive vicarious experiences were more likely to influence perceptions of police than negative experiences. This is contrary to many other findings, including those from Skogan (2006) who found that a negative experience with the police was considerably more likely to result in a negative impact upon the perceived legitimacy and performance of the police than a positive experience would enhance positive perceptions.

In addition to the impact of various forms of police-public contact, information regarding the work of the police and the procedural justness of the way that they conduct their daily business may be drawn from other sources that their work is premised upon, such as legislation. Murphy et al. (2009) emphasised the importance of procedural justice in those circumstances or environments in which the legitimacy of *legislation* could be questioned. They found that for those laws that were questioned by individuals regarding their legitimacy, procedural justice had a greater relevance and importance in ensuring compliance with the law. Whilst individuals may agree with the law, they may not agree with the working of the police, and vice versa (Tyler and Blader, 2000; Blader & Tyler, 2003). It is therefore possible that the fairness of procedures has little impact upon overall perceptions of legitimacy if the law that individuals have been caught breaking is deemed illegitimate in itself (Murphy et al., 2009). Where the law does not provide a consistent and universal application to behaviour, it becomes easier for individuals to question the legitimacy of that law. It is essential to explore this in relation to particular contexts whereby laws have been questioned, such as the roads context (Wells, 2008).

## 11.5 Compliance with traffic law

The use of instrumental models can be observed, and are highly visible within roads policing (Bradford et al., 2015), through the use of penalties as punishments to discourage particular behaviours and increasing those penalties where continued offending is observed and licence revocation is possible (DfT, 2016a). This reliance on instrumental methods has continued despite a reduction in funding for roads policing (House of Commons, 2016a; AA, 2017) and speedier developments in technology than the law (as discussed in chapter 3).

Issues have also arisen for the use of normative compliance within this context. In order for normative compliance to be encouraged, individuals must be aware of the reasoning behind the development of legislation, as well as supporting its existence. Knowledge, information, personal and vicarious experience all become central to judgments of police legitimacy in this way (Murphy et al., 2013). As Robinson and Darley (2004) described of criminal law, however, individuals may not always be fully knowledgeable of legislation when they are simply informed not to engage in a behaviour, as shown in previous chapters, and consequently are unable to use such information to guide their behaviour successfully.

A reliance upon normative compliance cannot be effective where an understanding of the supposed guides to behaviour is not simple or easily accessible, or when they appear to contradict. For example, where road safety guidelines regarding the suitability of speeds within a given area fluctuate or depend upon an array of influences, a single normative guide for behaviour is not necessarily enough. Whilst drivers are informed of a legal speed limit, they are also advised to consider weather, road and vehicle conditions that may influence the suitability of a speed (Goldenbeld & Schagen, 2007). This subjectivity enhances complications with understanding what is 'right' and 'wrong' or that behaviour that *should* be adopted according to a normative basis. It allows for the possibility of developing a normative commitment to a law that does not always equate to safety, further

complicating individual assessments of how they *should* behave or resulting in legal but not necessarily *safe* behaviours.

Similarly, complications have the potential to arise with the offence of using a mobile phone while driving when considering the importance of safe and ethical knowledge. As described within earlier chapters, many of the actions associated with the offence are not fully known, with an understanding of the legality of numerous actions remaining blurred for much of the general public, and even police officers themselves. If the development of knowledge is of such great importance, then the inability to ‘keep up’ with information and changes regarding the offence of using a mobile phone while driving and fully understand how to remain safe or legal is likely to influence the perceived fairness of police-public interactions that are initiated by the police for behaviours where the public are unaware of their associated illegality or risk to safety.

Considering the law and the police as two distinct portrayals of legal processes, Jackson et al. (2012a) identified multiple pathways that individuals may take in their attempts to comply with the law. The first pathway is the simple existence of instrumental compliance whereby individuals behave in ways that allows for the avoidance of punishment. The second is that of normative compliance, with behaviour according to what is perceived to be morally right, regardless of its legality or illegality. Pathway C largely utilises a normative approach to behavioural choice but focuses upon the perceived morality of the law, as individuals obey the law simply due to its existence of a ‘law’ and a moral obligation that the law should be obeyed rather than that of the behaviour. Pathway D similarly focuses upon normative obligations, but to the police rather than the law, as individuals obey the law in response to their felt moral obligation to behave as the police would expect.

The final pathway explains in more detail that a moral alignment can lead to compliance with the law when individuals obey the law regardless of their dis/agreement with such a law due to their moral connection with the police as a group. It is in this way that social

identity can be linked to compliance. A moral identification with the police as a group, rather than their behaviours or the laws that they work with, may encourage individuals to behave in accordance with that social group – generally a law-abiding manner (Jackson et al., 2012a). Interaction with the police (whether that be physically, verbally, through written form or even vicariously) is essential in order for this perceived social identification to be built.

Issues arise in this regard when considering roads policing and traffic offences. Individuals are most likely to come into contact with the police in this way through a police-initiated experience (Corbett, 2003), with police initiated contact being perceived as less satisfying than those initiated by members of the public (Murphy, 2009). Traffic law is experienced in differing ways to that of other forms of legislation and therefore potentially requires additional efforts to ensure the perceived procedurally just nature of an experience with the police. It regulates a daily encountered environment and the policing of such law does not necessarily require the physical presence of the police. Furthermore, it is frequently *mala prohibita* in nature, without any moral basis underlying the principle reasons for the development of such legislation, making it difficult to develop a moral obligation to the law – or normative commitment.

A commitment to complying with the law is also difficult where the law is difficult to understand or is not fully comprehended by members of the public. Attempts to act in accordance with such a law that is complex or not well-defined have the potential to allow for unintentional offending. As Wells (2007) found of the offence of exceeding the speed limit, some individuals are unaware of the speed limit in a given area or on a particular road. In those cases, a commitment to the law is not enough to ensure (successful) compliance or a reduction in the risk that led to the introduction of that harm (Wells, 2012). Unintentional behaviour cannot be deterred. Furthermore, as there are a range of factors that can influence any single journey or roads experience, it becomes difficult for the law to dictate those behaviours that remain safe in all circumstances. For example, speed limits



may not necessarily be *safe* under particular circumstances, such as low visibility or poor weather conditions near school entrances, but they may continue to be 'legal' (Wells, 2012: 151). Acting legally is not always enough to create a safe road user environment

It is possible that even when individuals support the work of the police, and agree with their moral alignment, they do not necessarily agree with legislation, or at least the governing of their own behaviour that is deemed safe (Svenson, 1981) and not requiring police attention (Horswill & McKenna, 1999). It is in this way that the role of the police becomes central to compliance with the law, almost acting as a mediating role between the law and legal behaviour. For those laws that can be questioned, procedural justice in terms of both vicarious and personal experience with law enforcement appears increasingly central to future offending or law-abiding behaviour.

That research that has been conducted of police-public interaction on the roads has largely been supportive of procedural justice theory, even when compared to the notion of distributive justice. Distributive justice refers to the allocation of resources within a group of people, and the fairness of those allocations (Cook & Hegtvedt, 1983). Individuals may expect to experience a fair and equal distribution of goods, services and justice to perceive equality in society. This can be linked to the *outcomes* of police procedures that are expected to be fair according to the offence committed and how an individual perceives their relation to that offence.

Although based on American experiences, Engel (2005) *did* consider both the influence of procedural and distributive justice within traffic stops encountered by members of the public through an examination of a national Police-Public Contact Survey. He found that distributive justice alone could not explain perceptions of (in)justice, and in particular that a favourableness of the outcome was not the most significant factor in overall perceptions of such an experience. The perceived fairness of procedures did play a significant role in the level of justice associated with the experience. Similar findings have been reported by

Bradford et al. (2015), who concluded that through the role of identity, procedural justice had a greater impact upon compliance with traffic law than distributive justice.

Not only does a procedurally just experience with the police enhance confidence in the police (Bradford et al., 2009) but a single encounter with the police through a traffic stop has the ability to influence individual perceptions of the police (Mazerolle et al., 2013). Police-initiated contact in this way therefore has great importance in the relations between the police and the public, as regardless of the outcomes, the procedures associated with traffic stops have the ability to influence perceptions of police fairness, and in turn, compliance (Mazerolle et al., 2012).

Mazerolle et al. (2012) found that when individuals were subject to a procedurally just traffic stop, as defined by a predefined cue card discussion including the presence of neutrality, participation, respect and trustworthiness, perceptions of the dangers of drink-driving improved significantly when compared to those not offered the same procedurally just experience. Furthermore, future-predicted self-reported compliance with the law was slightly higher for those in the experimental condition. A procedurally just experience increased the likelihood for future compliance. This has considerable implications for a behaviour that has such vast impacts upon driver ability and the safety of road users.

Despite these consistent findings regarding the existence of procedural justice and its relationship with positive attitudes towards roads policing, there has been found to be variation in public responses depending upon the type of offence being targeted by the police (Watling & Watling, 2015). Engel (2005) found that a traffic stop for speeding was reported as more legitimate and fair than a stop for other traffic offences, but Watling & Leal (2012) reporting a lesser perceived legitimacy for those stops relating to speeding than failure to wear a seatbelt and drink-driving. This inconsistency makes it more difficult to recognise how and why this (il)legitimacy is experienced.

Furthermore, whilst procedural justice may be experienced within the roads environment, with benefits to public attitudes and behaviour, there is equally the possibility for a procedurally *unjust* experience to occur, with those benefits of procedurally just experiences voided or even having the potential to show reversed results. Where those central tenets of procedural justice of voice, neutrality, trustworthiness and respect are not experienced within an interaction between the police and the public, there is the potential for procedural injustice to be perceived, with consequential impacts upon compliance. Although Bates et al. (2016) argue that not all of those components of procedural justice theory are necessary to ensure a procedurally just experience (p. 40), the removal of a single element has the potential possibility to eradicate the benefits of procedural justice on roads policing, as others have shown (Wells, 2012; Gau, 2013).

Policing of offences that are perceived to be unworthy of police attention, minor in their existence and consequences, or unnecessarily targeted, particularly enhances perceptions of police illegitimacy (Harcourt, 2001). Furthermore, with the confusing, contradictory and uncertain nature of traffic legislation, application of the *law* to the policing of *behaviour* on the roads has the potential to be met with resistance, potentially allowing for experiences of procedural injustice or negative perceptions of the fairness and legitimacy associated with such policing. This, again, potentially allows for the creation of a sense of illegitimacy regarding the policing of such behaviour.

## **11.6 Summary**

Both instrumental and normative models of compliance have been used to explain why individuals comply with the law. Although instrumental compliance is used in many ways, it has considerable limitations linked to the time and resource required of such a method of compliance (Smith & Stalans, 1991). Normative compliance, however, has the potential to alleviate those limitations by encouraging individuals to comply with the law as a result of a moral belief that particular behaviours should be performed and others should be avoided.

Linked to this model of normative compliance are attempts to enhance the perceived legitimacy, fairness and justness with the law and those policing it. The importance of 'trust', 'respect' and 'neutrality' have been found to play a considerable role in the overall perceived fairness of an encounter with the police, with implications for public perceptions of the police more generally (Tyler, 1988; Tyler, 2001; Hinds & Murphy, 2007). Consequently, satisfaction with the police remains a highly influential and therefore important element of policing (Tyler, 2004).

Problematically, however, the roads environment is subject to a wide and varied number of possibilities for police-public interaction, creating complexities in understanding how procedures are experienced. Interaction with the police in such environments is generally police-initiated, something which has been shown in other environments to be less satisfactory than public-initiated contact (Avdija, 2010). In addition to this, there are issues surrounding the nature of the law within the roads environment, particularly in its *mala prohibita* form, without any moral basis. This creates complications for eliciting any form of normative compliance that by its very nature is focused upon that moral basis, allowing for a moral connection to the law. Furthermore, issues exist with regards to the law and compliance when legality does not necessarily equate to safety; Individuals are being encouraged to comply (somehow) with laws that do not necessarily reduce harm, remove risk or improve road safety, with implications for compliance and road safety. The following chapter will therefore consider how both the procedures and outcomes associated with roads policing (and a focus upon mobile phone use while driving) has been experienced, with consideration of how those experiences may potentially impact upon perceptions of the police and future offending behaviour.

## **Chapter 12: Fairness in the policing of mobile phone use while driving**

### **12.1 Introduction**

Using both questionnaire and interview data, this chapter describes how members of the public interact with the police within a roads environment, and how they respond to identification of their offending behaviour. Both the procedures and the outcomes of such interaction will be considered. Procedurally, the process of identifying offenders, being identified as an offender and experiencing police-public interaction will be discussed from the perspective of both police officers and offenders. These will be discussed in terms of the identity, fairness and legitimacy that have been frequently linked to procedural justice (Tyler & Blader, 2003; Hough et al., 2010) and, in turn, to compliance.

In terms of outcomes, various responses have been afforded to the offence of using a mobile phone while driving, from education to court attendance (RoSPA, 2017). The possibility that the use of these varied *responses* may result in varied *influences* upon an interaction between the police and the public will be discussed. In particular, the use of education as an alternative to prosecution will be discussed in relation to notions of fairness, legitimacy and justness in police procedures. Not only will this use of education be explored in relation to its existence as an outcome of police-public interaction, but the procedural elements of that education itself will also be considered.

### **12.2 How procedurally just is policing of the roads?**

In order to explore the notion of procedural justice as described by Tyler (2004), various items were included within the questionnaires completed by offenders and employees experiencing Crash Course as a method of driver education. These items focused upon those notions of trust, respect and neutrality that Tyler (1988) and Jackson et al. (2012a) found to be central to perceived procedural justice. These procedural justice items were

initially grouped into three categories or scales<sup>59</sup> that explored perceptions of the police in general, perceptions of roads policing officers and perceptions of the police surrounding their most recent encounter with the police (for employees) or their encounter with the police that led to their attendance at Crash Course (offenders).

When summed, these scales ranged from a low score of five, indicating the lowest perceived procedural justice score, to a high score of fifteen, indicating the highest procedural justice score. The mean score for each category of procedural justice prior to attending an education course was concentrated around the median score of 10, varying only slightly between offenders and employees in terms of perceived procedural justice of roads policing and the police in general, as table 12.1 shows.

For offenders, a mean score of 10.3 was obtained for the procedural justice scale of roads policing officers compared to a mean score of 10.5 for the police in general, prior to receiving education. Despite this apparently small difference, a paired samples t-test showed a significant difference in offender mean procedural justice scores between roads policing officers and the police in general, with the police in general ( $M = 10.49$ ,  $SD = 2.56$ ) being more likely to be perceived as acting in procedurally just manners than roads policing officers ( $M = 10.29$ ,  $SD = 2.52$ ),  $t(936) = -3.79$ ,  $p < .001$ . This shows that offenders were significantly more likely to perceive the police in general as acting in more procedurally just manners than roads policing officers specifically. A similar statistic was obtained for employees, supporting claims that the policing of the roads is perceived as less fair than other forms of policing (Lundman & Kaufman 2003).

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<sup>59</sup> All three procedural justice scales consisted of three questionnaire items asking individuals to what extent they agreed or disagreed that the police enforce the law fairly, the police make their decisions based upon facts, and the police treat people with dignity and respect.

**Table 12.1:** Mean procedural justice scores at pre-course for offender and employee perceptions of the police summed scales

	Mean score
<b>Offender</b>	
'Roads policing officers' procedural justice summed scale	10.30
'The police in general' procedural justice summed scale	10.50
'Personal experience with roads policing officers' procedural justice summed scale	11.46
<b>Employee</b>	
'Roads policing' procedural justice summed scale	10.20
'The police in general' procedural justice summed scale	10.54
'Personal experience with roads policing officers' procedural justice summed scale	10.72

What is more interesting, however, is the greater difference between the mean perceived procedural justice scale of both roads policing officers and the police in general in comparison to that of personal experiences with the police. Both offenders and employees showed a higher perceived procedural justness associated with their own, most recent experience with roads policing officers than their overall perceived procedural justice of roads policing officers and the police in general, although it was considerably higher for those in the offender group, or those who had been offered Crash Course as the outcome of that encounter<sup>60</sup>.

Paired samples t-tests were conducted to explore the difference in means between these forms of procedural justice at pre-course. For offenders, there was a significant difference between scores on the roads policing procedural justice scale ( $M = 10.28, SD = 2.57$ ) and the personal experience procedural justice scale ( $M = 11.47, SD = 2.36$ ),  $t(925) = -17.00$ ,

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<sup>60</sup> As these scores relate to pre-course statistics, this was the case prior to course attendance.

$p < .001$ , with those in the offender group rating their own experience with roads policing officers as more procedurally just than their perceptions of roads policing officer procedural justness in general. A similar result was obtained for those in the employee group, with a significant difference between the traffic procedural justice scale ( $M = 9.66$ ,  $SD = 2.28$ ) and the personal experience procedural justice scale<sup>61</sup> ( $M = 10.72$ ,  $SD = 2.37$ ),  $t(147) = -5.62$ ,  $p < .001$ . Both groups of participants showed a greater perception of procedural justice surrounding their own personal experiences with the police than they did in their general perceptions of the work of roads policing officers.

This is intriguing as it not only suggests that individuals perceive roads policing officers as acting in less procedurally just ways than the police in general, but also that their own experience with the police on the roads, whilst much more positive, is insufficient in overcoming those notions of procedural injustice concerning roads policing. This can be further understood through a focus on fairness more specifically when considering the percentage of individuals agreeing with the *fairness* of police law enforcement<sup>62</sup> in each of these three categories of policing, as figure 12.1 depicts.

Again, those personal experiences with the police are of particular interest here. Personal experiences of traffic law enforcement were particularly perceived as more *fair* than perceptions of both traffic law enforcement in general and overall law enforcement prior to experiencing Crash Course. 71% of offenders and 64% of employees either agreed or strongly agreed that the law was enforced fairly during their personal experience. Although the majority of participants perceived personal experiences with traffic law enforcement as fair, the *general* perception of traffic law enforcement fairness remained somewhat lower, particularly for those in the offender group. This suggests that whilst perceptions of the police and their work follow on somewhat from police-public interaction, they are also

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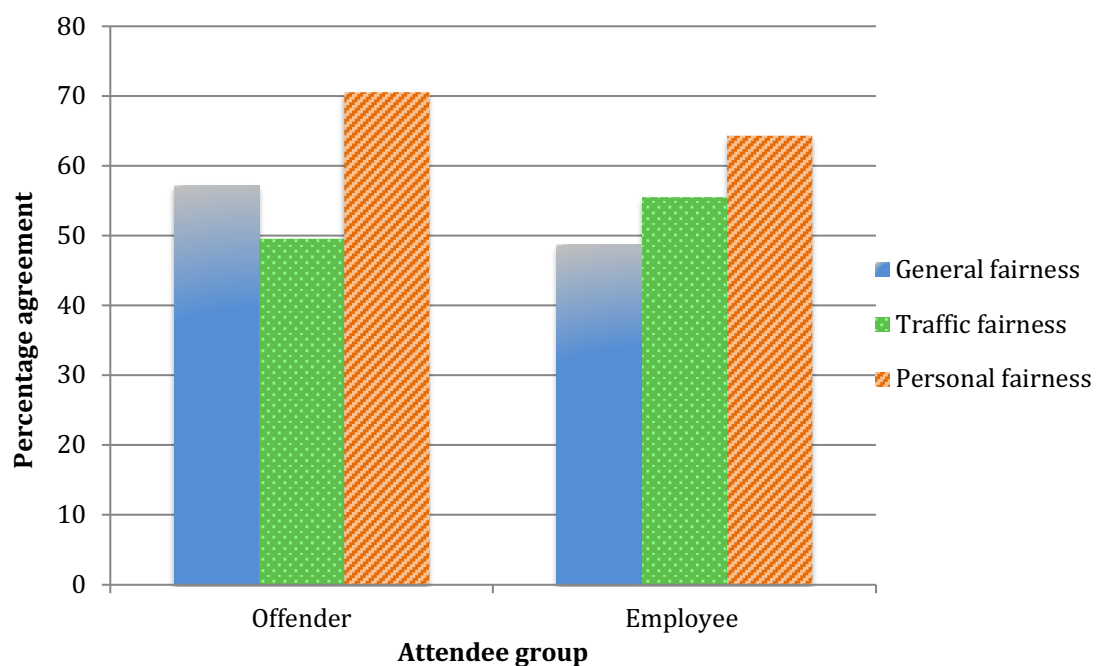
<sup>61</sup> Based upon only those who had experience with the police on the roads environment.

<sup>62</sup> Understood through the question “to what extent do you agree or disagree... the police generally/traffic police/in your personal experience, the police enforce the law fairly.”



influenced by factors external to this, such as observation of the work of the police, vicarious police experiences or even media representations of the police. As such, whilst personal experiences with the police are significant in developing an understanding of police performance and developing perceptions of fairness and legitimacy, the importance of those influences such as vicarious experiences must not be underestimated.

**Figure 12.1:** Bar chart depicting offender and employee percentages of pre-course agreement with law enforcement ‘fairness’



In an exploration of vicarious experiences with the police, Rosenbaum et al. (2005) found that those interactions with the police experienced by other individuals, rather than oneself, had a substantial impact upon the attitudes and perceptions individuals held regarding the police. Others have also shown that a single positive experience with the police does not wholly counteract negative perceptions of the police (Skogan, 2006; Hinds, 2007). This was supported here; whilst a continued and persistent acknowledgement of positive and procedurally just experiences with the police may enhance perceptions of the fairness of police law enforcement, a single encounter does not appear to do so. Those experiences

prior to the one being questioned here are unknown and may have been perceived as extremely unjust, unfair or illegitimate in comparison.

### 12.3 Defining procedural justice on the roads

The analyses presented above were based upon a notion of procedural justice as obtained from the current literature, particularly upon the work of Tyler (1988; 2004), in which notions of trust, respect and neutrality were claimed to contribute to an overall perception of fairness and consequently, procedural justice. In order to gain a more detailed understanding of these procedural justice scales, additional analyses were performed using the quantitative data collected. In particular, factor analysis was conducted of the pre-course offender questionnaire data<sup>63</sup> in relation to the range of attitudes towards the police (See table 12.2 for the components and factor loading results of this analysis).

**Table 12.2:** Summary of two components resulting from principle components analysis for variables assessing procedural justice at pre-course

	Component 1 - 'observed procedural justice' loading	Component 2 - 'comparative treatment justice' loading	Communality
I have confidence that the police do their job well	.86		.80
The police treat people with dignity and respect	.84		.80
I have confidence that <b>roads policing officers</b> do their job well	.84		.79

<sup>63</sup> Only offender data were subjected to this factor analysis due to the nature of such individuals' attendance at Crash Course as resulting from a recent encounter with the police in comparison to employees whose most recent experience with roads policing officers was less well understood.

The police make their decisions based on facts, not personal biases or opinions	.84		.74
The police enforce the law fairly	.82		.72
<b>Roads policing officers</b> police treat people with dignity and respect	.81		.75
<b>Roads policing officers</b> make their decisions based on facts, not personal biases or opinions	.79		.64
<b>Roads policing officers</b> enforce the law fairly	.73		.54
<b>In my experience</b> , the roads policing officers enforced the law fairly	.73	-.51	.84
<b>In my experience</b> , the roads policing officers made their decisions based on facts, not personal biases or opinions	.70	-.49	.77
<b>In my experience</b> , the roads policing officers treated me with dignity and respect	.68	-.40	.64
<b>In my experience</b> , the outcome I received was fair	.66	-.50	.76
The police apply the rules consistently to different people	.62	.50	.87
<b>Roads policing officers</b> apply the rules consistently to different people	.53	.55	.88

Following inspection of the suitability of the data, to which all recommendations were met (Pallant, 2013), 14 items assessing elements of procedural justice were subjected to principle components analysis (see table 12.2). This analysis revealed the presence of three components with eigenvalues above 1, explaining 56.85%, 11.20%, and 7.22% of the variance respectively, and a total variance of 75.27%. As the requested scree plot indicated a clear break between components two and three, and the pattern matrix identified only two factor loadings for component three, however, only a two-component solution was retained for additional exploration. These two components explained 56.85% and 11.20% of the variance respectively, with a total variance explained of 68.04%. Oblimin rotation identified a simple structure with one component showing loadings from all variables, but also with both components of the solution showing overall strong loadings. The variables used were therefore strongly connected to the two components identified by the factor analysis performed. Together, the components relate well to previous research identifying trust, respect and fairness as central to procedural justice, at least for the police in general and with personal experiences of traffic law enforcement. However, the presence of these components split the initial procedural justice scales into two distinct scales worthy of additional attention, rather than simply one single procedural justice scale as may have been expected following the literatures previously discussed.

For component one of the principle components analysis, all variables loaded strongly upon the component, but seven showed particular strength and were most closely linked to the component. These variables represented items that enquired into whether; roads policing officers treat people with dignity and respect, roads policing officers make their decisions based upon facts roads policing officers do their job well, generally the police treat people with dignity and respect, generally the police make their decisions based upon facts, generally the police enforce the law fairly, and individuals have confidence the police in general do their job well<sup>64</sup>.

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<sup>64</sup> Specifically, these items were; “in general, I have confidence that the police do their job well; in general, the police treat people with dignity and respect; I have confidence the traffic police do their

This component may therefore be understood as an ‘observed procedural justice component’, with confidence in the work of the police, respectful treatment of individuals, and neutral treatment of all being central to that but with a particular focus upon a broader, assumed notion of police behaviour rather than any experiential understanding. This supports those previous suggestions that trust, respect and neutrality are all central to perceived procedural justice (Tyler, 1988; 2001; Hinds & Murphy, 2007), but also suggests that an overall notion of the police performing effectively may be central to the theory of procedural justice, or at least is highly indicative of a procedurally just notion of the police.

A consistency in application of the rules as a variable, however, did not load upon this component, suggesting that this form of apparent ‘neutrality’ is less indicative of a perception of *observed* procedural justice than those other notions of trust, respect, and overall confidence in the police performance. There is a distinction between a police act of making decisions surrounding offending behaviour according to facts *once contact has been made*, or a ‘neutrality of decision-making’, and the application of rules more generally *prior to that contact being made* between the police and the public, or a ‘neutrality of offender identification’. With the former more closely linked to perceptions of observed procedural justice and the latter less so. This notion of neutrality within offender identification, however, links into the loading of the second component developed from the principle components analysis.

Interestingly, the second component consisted of six principle variables, although they were not all positively loaded on the component in question. Only those two variables relating to a consistency in application of the rules<sup>65</sup> within the roads environment and more

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job well; in general, the police make their decisions based on facts, not personal biases or opinions; in general, the police enforce the law fairly; traffic police treat people with dignity and respect; traffic police make their decisions based on facts, not personal biases or opinions”.

These variables are ordered in their relative factor loading strength respectively.

<sup>65</sup> The question asked ‘to what extent do you agree or disagree that the police apply the rules consistently to different people?’

generally were positively loaded upon this second component. The other four variables were negatively loaded and related specifically to perceptions of the personal experience that an individual had previously had with traffic law enforcement. These variables existed as items within the questionnaire enquiring into their experience with roads policing officers that led to their attendance at Crash Course and whether; the police enforced the law fairly, the police made their decisions based upon facts, the police treated the individual with dignity and respect, and the outcome received was fair. These negative loadings all relate to an individual's personal experience with roads policing officers and appear to contrast more general perceptions of whether the police apply the rules consistently to different people, or those variables that were positively loaded upon this component. All of these loadings therefore link to individual treatment that is compared to the treatment of others and may be termed a 'comparative treatment justice' component.

Perceptions of the application of rules to others appears closely, albeit negatively, linked to an individual's personal experience with roads policing officers, as individuals compare their own experience to that of other people, or at least the treatment that they perceive other people would experience. This comparative treatment allows individuals to develop their own understanding of perceived fairness in line with the policing of other individuals. Where those other road users are observed as acting in similar ways to oneself but their offending behaviour remains undetected, a sense of unfair comparative treatment would likely result. It is in this way that the previously proposed notion of a 'neutrality of offender identification' becomes important; individuals are likely to find it difficult to recognise a fair and just experience where other road users appear to escape identification and prosecution for the same actions. Thus, procedural justice may not simply be a concept defined by an overall perception of the fairness of police procedures but may be better understood as consisting of two elements, one of which surrounds a global understanding of police behaviour, and the other which consists of an experiential notion of individual fair treatment in comparison to that perceived of others.

Using these two newly formed components, hierarchical multiple regression analyses were conducted to examine the extent to which they could be used to explain offender behaviour. The model used the two variables entitled ‘observed procedural justice’ and ‘comparative treatment justice’ developed from those aforementioned questionnaire items. Offending behaviour as a variable consisted of speeding, reading a text message, talking on a handheld mobile phone, drink-driving and driving without wearing a seatbelt. Preliminary analyses were conducted to ensure no violations in the assumptions of normality, linearity, multicollinearity and homoscedasticity (Pallant, 2013: 164). Table 12.3 shows the results of the regression analysis.

**Table 12.3:** Summary of multiple linear regression analyses for variables predicting offending behavior (pre-course)

	Model 1 ( $\beta$ )	Model 2 ( $\beta$ )
Observed procedural justice	-.21***	-.34***
Comparative treatment justice		.17**
Age	.02	.04
Gender	-.16***	-.13***
R <sup>2</sup>	.07***	.08***
N	855	

Table displays standardized beta values ( $\beta$ ).

Dummy codes – Age (0 = below 30, 1 = 31+), gender (0 = male, 1 = female).

\*\*\* Indicates significance at  $p < .001$ , \*\* indicates significance at  $p < .01$ .

The regression analyses provided a proposed model to explaining driver offending behaviour in the six months prior to attending Crash Course. The proposed model, including both the observed procedural justice component and the comparative treatment

component resulting from the previous principle components analysis accounted for only 8% of the variance in offending behaviour. Of the variables considered, observed procedural justice, or the confidence, respect and neutral treatment of all as perceived of the police, explained most variance ( $\beta = -.34$ ). Thus, these aspects of procedural justice appear better able to explain offending behaviour than the comparative treatment justice, or comparison of one's own treatment to that of other individuals. As such, those wider notions of the way that the police work generally are of greater importance to behaviour.

This 8% of explained variance represents only a small proportion, questioning somewhat the conclusions of Tyler and Sunshine (2003) that procedural justice is able to influence compliance with the law. It does not appear that these elements of behaviour play a substantial role in explaining offending behaviour alone. However, there are limitations in considering the ability for these procedural justice components to explain driver behaviour. Primarily, the behaviour in question considered the six months prior to attendance at Crash Course, part of which would have existed as 'prior to being caught' and part of which would have existed as 'post being caught'. It is possible that these statistics would have differed if they had considered a shorter time period or only that time since individuals had been identified as 'offenders'. It may be an interaction with the police, and/or an offer of education, that assists in the developed importance of procedural justice factors, both personally and observed of others rather than those elements of procedural justice playing a general importance in behaviour. An experience of Crash Course may also influence this as the work of the police is explained by those with personal experience or a background in policing. This will be considered in detail later in this chapter.

In an attempt to explore this further, an additional regression analysis was performed upon those same two independent variables, observed procedural justice and comparative treatment, but with future behavioural intention as the dependent variable, at pre-course. This variable considered questionnaire items that asked "to what extent do you agree or disagree with the following statements about your behaviour, in the future... 'I will always



obey speed limits'; 'I will avoid using a handheld mobile phone while driving at all times', 'I will avoid using a hands-free mobile phone while driving at all times'; 'I will wear my seatbelt at all times while driving'." The results of this regression analysis are presented in table 12.4.

The final model, again including both observed procedural justice and comparative treatment justice, accounted for 14% of the variance in future behavioural intention. Of the variables considered, it was only observed procedural justice that added significant explanatory value to the final model ( $\beta = .28$ ). Considering how an individual intends to behave in the future, comparing one's own treatment to that of other individuals appears to be of little explanatory importance. Rather, it is the more general notions of trust and respect that are of significance.

**Table 12.4:** Summary of multiple linear regression analyses for variables predicting future behavioural intention (pre-course)

	Model 1 ( $\beta$ )	Model 2 ( $\beta$ )
Observed procedural justice	.33***	.28***
Comparative treatment justice		.06
Age	-.05	-.05
Gender	.14***	.14***
R <sup>2</sup>	.14***	.14
N	855	

Table displays standardized beta values ( $\beta$ ).

Dummy codes – Age (0 = below 30, 1 = 31+), gender (0 = male, 1 = female).

\*\*\* Indicates significance at  $p < .001$ , \*\* indicates significance at  $p < .01$ .

Comparing this to the 8% of variance explained in behaviour ‘over the last six months’, above, using the same variables, notions of procedural justice appear better able to explain intended behaviour than previous behaviour. This does suggest that there may be something about that experience with the police or an offer of education as an alternative to prosecution that is able to influence intentions for future behaviour. It is possible that the salience of a personal encounter with law enforcement enhances the importance of procedural justice and that this may encourage individuals to endeavor to change their *future* behaviour rather than having influenced behaviour in the *past*. There are a range of additional aspects of the policing process that can be considered alongside the institutional procedures considered above in an attempt to explain this, as the remainder of this chapter will explore.

#### **12.4 Legal, institutional and individual legitimacy**

Not only may legitimacy be understood in terms of the work, behaviour and experiences with/of the police, but that of the law as an institution itself also has the potential to influence perceptions of law enforcement (Rasinski et al., 1985; Tyler & Blader, 2000). Thus, the police may attempt to act legitimately but may find difficulties in doing so where the laws they are expected to enforce are perceived to be illegitimate. And vice versa, whilst the law may be perceived as legitimate, the way it is policed may create overall notions of illegitimacy surrounding that law.

Although not focused specifically upon legitimacy, when asked about the acceptability of handheld mobile phone use while driving, only 3.9% of offenders and 2.1% of employees agreed or strongly agreed that it was acceptable to use a handheld mobile phone while driving prior to attending Crash Course. In contrast, 58.4% of offenders and 50.4% of employees agreed or strongly agreed that it was acceptable to use a hands-free mobile phone while driving. This is despite the similarity in distractive abilities of the two actions (Strayer et al., 2014; 2015). Thus, the legality of the behaviour appears to influence the

acceptability of the behaviour, and the law surrounding handheld mobile phone use while driving appears fairly well-justified in terms of public notions of acceptability. Perceived acceptability of the law acts as only a tenuous link between legislation and legitimacy, however, it links to notions of morality that *have* been closely linked to a perceived legitimacy and compliance with the law (Bottoms & Tankebe, 2012).

As the previous chapter highlighted, Jackson et al. (2012a) identified multiple pathways that individuals may take in their attempts to comply with the law rather than simply those normative and instrumental means. One of those relates specifically to a notion of the legitimacy of the law – ‘pathway C’. Beyond traditional notions of normative compliance with the law, Jackson et al. (2012a) claimed that this pathway explains how and why individuals obey the law as a result of a perceived legitimacy and morality associated with that law. This was supported through interview data collected as part of this thesis.

Throughout the interview with offender Jean, who claimed that she did not frequently disregard the law on the roads, this identification of a legitimacy of the law and a moral obligation to obey the law, solely as a result of its existence as law, was observed, as the following quotes show:

“I always usually put my seatbelt on, erm, I was in a hurry and I’d been thinking about something else. It sounds silly because you think if you always did it you would put it on. I did always put it [a seatbelt] on because it was the law, I didn’t really put it on because I thought it made that much difference if I’m honest, I did it because it was the law.” (Offender Jean)

“I just felt so guilty because I’d broken the law, so that’s what I was thinking. I was not thinking ‘oh, that’s not safe’, I’m feeling guilty because I’d broken the law. And then I had to go and sit in the police car which is not easy but to be honest, I felt... so... erm, you know, stupid, and er, as I say, guilty for not

having obeyed the law that I didn't feel defensive at all, I was just very, very sorry." (Offender Jean)

Although Jean shows remorse at breaking the law, or at least of being caught breaking the law, she discusses this in terms of the law itself and her felt moral obligation to obey the law rather than any relation to safety or the action itself. She identifies the nature in which her driver behaviour is guided by the law, with little consideration of how that law relates to safety more generally. In this way, legislation is trusted as an 'expert' (Beck, 1992: 57) that is able to suitably guide behaviour without any expectation for further acknowledgement of its relation to safety and/or the associated penalties. This does support previous claims that a perceived legitimacy of the police can be understood, in part, through an importance of a felt moral obligation to obey the law, regardless of what that law dictates (Tyler & Huo, 2002), as well as that 'pathway C' proposed by Jackson et al. (2012: 5). In this case, the law is described as enough to elicit compliance, although there are obvious circumstances under which that morality is *not* enough to guide behaviour, as Jean's offending behaviour suggests. These circumstances were discussed in relation to time and social pressures within chapter 8 – likely existing as considerable pressures that weigh upon that supposed naturally perceived legitimacy of the law.

Although Jean, above, focused upon the legitimacy of the law and her general obligation of that law, other interviewees focused more closely upon the ways in which the law can be seen as illegitimate, or failing to adequately account for a range of actions that may unintentionally exist as offending behaviour on the road:

"When you're driving big powerful machines or you're driving, you know, any type of car, the speed does generally creep up on you so therefore you've got to keep concentrating on keeping your speed down so you can involuntarily speed and I think a lot of people do get done for that, you don't realise, they're

not purposely speeding, they're just driving along and they drive too fast and then get done.” (Offender Jamie)

“I was pulling my phone back up by the headset, by the handset, and the next thing I know, through my peripheral vision I saw this blue light coming in my wing mirror, and of course the officer pulled me over and said, you’ve got your phone in your hand, and I said I haven’t actually, I was actually pulling it up by the handset.” (Offender Kevin)

Discussing the offence of exceeding the speed limit, Jamie identifies possibilities for non-compliance with the law that are not the result of any intentional offending but simply represent a perceived failure of the law in being able to recognise an ‘accidental’ or ‘unintentional’ offender. In this way, the law may be considered illegitimate, as it fails to account for those behaviours that are not intentional or are not associated with any form of *mens rea*, or guilty mind. An individual becomes an offender simply as a result of a particular action, regardless of the reasons (or lack of) for that action. The police can, in this way, be criticised for enforcing such law when individuals perceive it as unfair. Rather than the legitimacy of the law simply being a reason for compliance (Jackson et al., 2012b), the *illegitimacy* of the law allows for unintended offending and also has the potential to become a sufficient reason for non-compliance where individuals oppose such legislation.

Kevin also highlighted the nature of insufficient legislation in discussion of his own behaviour. As legislation surrounding mobile phone use while driving is vague in its description of what constitutes ‘use’ of a mobile phone, there are a range of actions that may potentially be considered legal, despite their distractive nature, as Kevin describes of the ‘mobile phone use’ that led to his attendance at Crash Course. As was highlighted in part two of this thesis, this is a limitation of this legislation that, when applied to the roads environment in reality, likely creates confusion in an understanding of the law for both police officer and other road users. The law fails to be a sufficiently legitimate guide to

behaviour as its associated behaviours cannot be policed consistently and fairly where there is not a unanimous understanding of what constitutes the offence and what does not.

Alongside this consideration of the law, the police as an institution can be considered in relation to perceptions of fairness, legitimacy and justice. Throughout the interviews, there were a number of actions adopted by the police as an institution that were identified by offenders as being unjustified or failing to have a credible rationale supporting their adoption. The policing of traffic offending more generally was also explained in this way, as the following quotes show:

“There was a patrol there who were out to get people and the deal was that there were actually 2 plain clothed guys at the lights and they had called through to the guy to say, you know, get this car here, the white Fiat... and then it was just made worse by the fact that these guys were in plain clothes, which they are allowed to be and I know that is what they do, you could expect it, but I just felt it was a bit underhand, a bit smarmy. That’s purely a subjective thing, it’s got nothing to do with the legality or the appropriateness of their actions. It just felt a bit sneaky, they didn’t even have uniforms on you know.”

(Offender Lee)

“I didn’t realise there was a police car behind me, a *plain* police car.”

(Offender Rachel)

“There’s the old idea where you believe that the police are stopping you because they’re revenue collectors and you do wonder when they are parked up and they’re observing traffic and obviously you think, ‘they’re not preventing offences, they’re just observing them’, and then they’re actually taking action and it’s just boosting up their arrest rate, which is apparently a

myth but that seems to be the general way of thinking with regards to the police.” (Offender Kevin)

The way in which police forces operate can be understood somewhat through the visibility of their policing, with unmarked policing being described here by Lee in a particularly negative light. In using tactics that fail to allow for the obvious, overt, visibility of policing, perceptions of the legitimacy, and therefore potentially the perceived trustworthiness of the police, may be negatively impacted. When being policed in this instrumental way, individuals expect to be able to acknowledge when their behaviour is being policed (Wills & Wells, 2012), with unwarned policing perceived as almost illegitimate in its ‘hidden’ nature. For those being ‘policed’ in this way, this is likely to be perceived in a more negative light than when those same people consider the policing of other individuals who appear to be more ‘worthy’ of police attention (Wells, 2012: 120).

Kevin pointed out that when policing the roads, police officers perform a role that is observational rather than responsive, appearing to simply observe offences and issue notices of intended prosecution rather than preventing any harm. This relates back to those issues surrounding risk and its invisibility, as explored within chapter 9, and the nature of laws based on *mens rea* that do not require any harm to be observed before an offence is committed. Individuals are able to justify their actions or avoid the personal implications of the penalties by focusing on this lack of harm (Sykes & Matza, 1959) and the ‘unfair’ practices that police forces adopt. As the act of using a mobile phone while driving does not necessitate any harm to be caused before it becomes an offence, as with many other traffic offences, road users display some difficulty in recognising the legitimacy of policing actions that target such behaviours. The risk that it attempts to mitigate is invisible and recognition of its existence is therefore difficult, or at least allows for the policing of such behaviours to be questioned.

Rather than being indicative of police officers themselves, however, the actions described above are indicative of police processes and the ways in which the police as a force are expected to act as part of their role in identifying offenders. The actions of individual police officers, conversely, were described in differing ways that did not reflect the perceived legitimacy of the actions of the police force as a wider social group. The above quotes suggesting an illegitimacy in police actions were overwhelmed by those describing individual police officers in a positive light, as the following quotes from Lee, Debbie and Jamie, attending Crash Course as ‘offenders’, show:

“To be honest I was dreading interacting with the policeman because in the past when I was a, when I was a teenager I was stopped for speeding and I was made to feel, you know, two inches tall, sort of thing, but he [the police officer in this instance] wasn't like that in any way.” (Offender Debbie)

“Oh they were terrific, the man [police officer], lovely.” (Offender Lee)

“They were very good, I mean obviously they're still police so they're still gonna do you for what you done but they were very good, very courteous, they were very nice, they were both professional.” (Offender Jamie)

Experiences with police officers as individuals are not always reflective of attitudes towards police processes and/or the law that is being enforced. Whilst individuals may agree with the work of the police, they may fail to agree with the legislation that they are required to work with, and vice versa. The above quotes imply that whilst individuals may not have initially responded well to their behaviour being questioned when stopped by the police, they did perceive their experience with the police to be relatively positive, and more positive than initially expected in Debbie’s case. Whilst support for the police may be evident, support for the law, or even policing practices that are required of individual



officers, are not synonymous with this. It is therefore important to consider how police-public interaction is experienced and perceived by members of the public.

Experienced as part of police procedures when interacting with the public, the ability to voice one's opinions or represent themselves when interacting with the police has also been identified as a particularly essential aspect of procedural justice (Lind et al., 1990). Although this was not explored within the questionnaires, interviews with both offenders and employees highlighted the importance of personal interaction, and an allowance to voice one's opinion as part of that, as the following quotes from Lee and Chris highlight:

“When you haven't looked somebody in the eye to be treated like that, it makes it more anonymous, it removes you, the culprit, from the person who's imposing the penalty and the fact that it is entirely depersonalised, I don't think it necessarily encourages co-operation, I think it possibly risks inhibiting it... because you're just being treated like another number, you know, you've gone into a machine and you've come out the other end, whereas at least on the Crash Course you are treated as you arrive as a human being, admittedly one that's screwed up, but you're still treated like a human being, and I think that's respectful.” (Offender Lee)

“With a camera you are literally just, you're flashed, letter through the post, you get given your fine, you get given your points, you don't really learn anything from it, you just get, you know, you get hit in the pocket rather than anything else, whereas if the police were there they would have talked to you, you know, explained to you the consequences of speeding, you know, or asked you why you were speeding.” (Employee Chris)

Speed cameras, alongside many other forms of automated policing, do not allow for any physical interaction with a police officer to take place, removing that element of

representation, or voice, that is linked to perceptions of procedural justice (Folger, 1977). As Chris also confirms, to be able to engage with a police officer allows for a discussion of the offence that has been committed whereas the policing of behaviour through technological means does not allow for any physical interaction or representation on behalf of the now-defined ‘offender’. The individualisation, rather than the ability to avoid penalisation, however, appears central to the importance of physical police-public interaction. Both Lee and Chris identified the procedural nature of speed camera detection as being methodical and lacking any individuality, with that being linked to a sense of injustice, in accordance with findings reported by Wells (2012).

Linking notions of voice and respect, Lee, above, pointed out how the anonymity associated with speed camera detection fails to allow for any communication with a police officer but also indicates a lack of respect for those using the road networks – these technologies are unable to show respect or detect it where it exists in those individuals who would not normally exist under regulatory scrutiny. Both trust and respect were also of significant importance in those discussions of police-public interactions from police officers, as the following quotes from Daniel and Mike suggest:

“The motorist is one of the most hard done to criminals in the world, in the UK, because you burgle a house, you get a caution, you park on zigzags or you get caught speeding, you get 3 points and a £100 fine. Whereas, you know, that’s not, all you’re doing is affecting yourself, unless you crash, whereas if you’re burgling somebody it, you’ve, you know, invaded their privacy, you’ve done all sorts of stuff, and it affects them.” (PC Daniel)

“Obviously it can have quite a bearing on people receiving points on their licence, and these kinds of offences are probably the only offences really which we have contact with decent members of the public as offenders, you know, not normally, they’re not burglars, they’re not drug dealers, they’re just

people using their mobile phone, so sometimes a bit of reassurance doesn't go amiss." (PC Mike)

The police officers here appear to identify with road users as a group of people, recognising a similarity in their generally hard-working, law-abiding nature with themselves. This links into those notions of social identity presented within the previous chapter that Bradford (2014) claims promoted cooperation with the police when positive identity-based relations are made. Those individuals who are caught offending on the roads do not generally have any intention to cause harm and this is recognised by police officers. They are therefore considered 'decent' people by those policing the roads, whilst the identity of other offenders such as 'burglars' and 'drug dealers' contrasts that. Those who commit offences such as burglary have therefore been described as an 'out-group' above, or a group that does not share the beliefs and norms of that 'preferred' social group (Tajfel & Turner, 1979).

In such an interaction, an explanation for the policing of particular actions can be provided and tailored to the experience of each individual. Where the social identification of a shared general law-abidingness can be stipulated, an understanding of the beliefs and attitudes held by those policing the roads is more likely to be developed, and even internalised by those caught offending (Bradford et al., 2014). Where the police are given the opportunity to express sympathy with an offender as part of an understanding of their otherwise law-abiding identity, that shared identity is reinforced and the legitimacy of the police can be appreciated, regardless of the perceived legitimacy of the law.

Consequently, subjecting such (perceived) heavy fines and severe penalties upon those who have committed an offence without these physically obvious elements and who are otherwise law-abiding, hard-working individuals appears unfair, even from the perspective of some of those policing the offence. In this way, a mutual understanding of respect for those who are caught offending within a roads environment is almost developed, but that

respect is based upon their behaviours external to the roads environment, rather than their offending on the roads being used to define their identity. This link to social identity is therefore made complex when those individuals who often perceive themselves as ‘law-abiding’ and respectable individuals are drawn into regulatory attention (Wells, 2007), or the norms of the road user are questioned by those policing the roads.

This section has highlighted a distinction between various forms of police representation – the law, the institution and the individual. These findings support the work of Jackson et al. (2012a) who claimed that the law and the police could be considered two separate elements of a perception of procedural justice, but also furthers this by proposing that the law, the police, and police actions are actually three distinct aspects of police processes and therefore can be understood in differing ways in terms of procedural justice. The legitimacy of roads policing can potentially be understood as a three-tiered process, with the legislation associated with driver behaviour situated at the top, followed by the institution of policing, and individual police behaviours at the bottom as a or final layer of legitimacy. All three of these aspects of legitimacy may be combined to create an overall notion of the legitimacy of roads policing. Procedures *within* the policing of offences may have the ability to further influence this perceived legitimacy.

### **12.5 Fairness in outcomes**

Although this chapter thus far has been focused upon notions of procedural justice and the treatment of offenders by those policing the roads, it will now progress to discuss the ways in which those who are identified as offenders experience the ‘outcome’ of that policing. The data collected as part of this thesis has suggested that whilst the procedures previously discussed are of centrality, the outcomes associated with police-public interaction are also of great importance, with procedures *and* outcomes being more closely linked than has previously been suggested.

As an outcome of police-public interaction following offending behaviour, education is defined as an 'alternative to prosecution', allowing for the avoidance of the costs and penalties associated with prosecution. Considerable importance is placed on one's driving licence as it often provides the capabilities to work, socialise and move freely around the world (Haustein et al., 2009). It is one of a small number of keys that allow access to successful social and working lives. The potential of having penalty points on that licence jeopardises this freedom whereas education as an alternative to prosecution allows for the opportunity to avoid penalty points and/or fines.

Figure 12.2 presents the perceived fairness of the outcome of that interaction for those who had been offered Crash Course as an educational alternative to prosecution, prior to their experience of the course. A considerable proportion (71.1%) of offenders agreed or strongly agreed that the outcome they received was fair. Having potentially considered an offer of education in comparison to the alternative of prosecution that may be perceived as having greater consequences with regards to an individual's driving licence, it logically follows that an offer of education is perceived as fair by the majority of individuals. In consideration of the fairness of outcomes, an offer of education as an alternative to prosecution in the form of Crash Course does, therefore, appear to provide a great level of perceived fairness.

In order to explore the potential benefit of an offer of Crash Course in particular as an educational alternative to prosecution as the outcome, a paired samples t-test was conducted. This allowed for a comparison between offenders, who had been offered Crash Course education as an outcome and employees, who had not<sup>6667</sup>. The t-test showed that there was no significant difference in the perceived fairness of the outcome between offenders ( $M = 3.90, SD = .86$ ) and employees ( $M = 3.79, SD = .90$ ),  $t(142) = 1.11, p >$

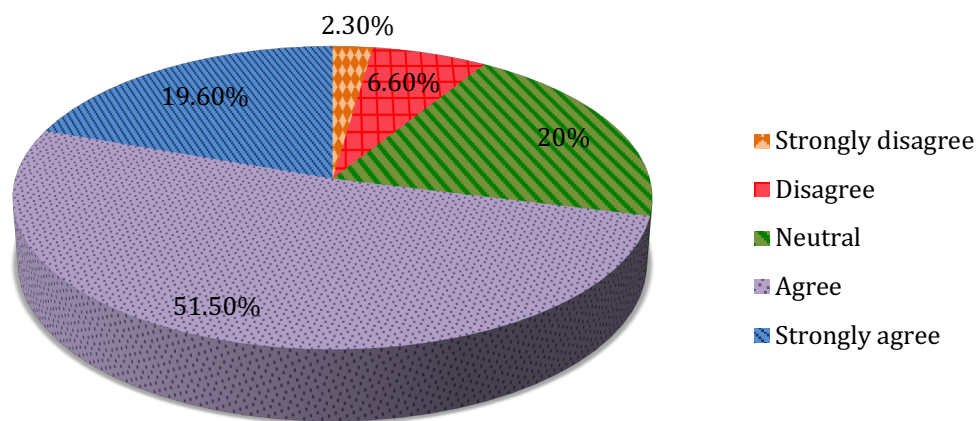
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<sup>66</sup> At least on this occasion, and unlikely having received Crash Course as an outcome at any other time period due to the geographical restriction of the course.

<sup>67</sup> When considering those employees who have previously had an experience with roads policing.

.05. This suggests that an offer of Crash Course as a particular form of education does not itself create differences in perceptions of fairness - those who are shortly to experience Crash Course as the result of being caught committing an offence do not perceive its use as significantly more or less fair than those attending for employment purposes (and therefore did not receive Crash Course as a result of their interaction with the police).

**Figure 12.2:** Offender pre-course perceptions of the fairness of the outcome of their encounter with the police (%) (total n = 944)



Despite this insignificant difference between offenders and employees in relation to perceived outcome fairness, there *was* a noteworthy difference in the perceived fairness of the outcome between those who *had* and *had not* previously received any motoring convictions. An independent samples t-test was conducted to examine the difference in perceived fairness of the outcome for offenders who had previously received a motoring conviction ( $M = 3.90, SD = .83$ ) and offenders who had not previously received any motoring conviction ( $M = 3.67, SD = .94$ ),  $t(479) = 2.83, p < .001$ . This indicates that those with previous motoring convictions perceived a greater fairness in the outcome of their encounter with the police that resulted in Crash Course than did those who had not received

any previous motoring convictions. This may be linked to the nature of ‘totting up’ systems, that increase the risk of licence revocation as more offending behaviours are identified; for those more ‘at risk’ of losing their licence<sup>68</sup>, the ability to attend education as an alternative to prosecution may be perceived as being more fair.

Whilst there are varying potential reasons for this greater perceived fairness for those with previous motoring convictions, it suggests that education as an alternative to prosecution is a positive step in enhancing the fairness associated with police-public interactions. As previous research has suggested, this has great benefits for both public attitudes and compliant behaviour (Sunshine & Tyler, 2003). This is particularly important for those groups of people that find themselves identified as ‘offenders’ within the roads context.

Described by police officers as ‘decent’, well-meaning and ‘hard done to’ individuals, those drivers often stopped for seatbelt and mobile phone offences consider themselves respectable and their behaviour as not intending to cause harm. Nonetheless, they do find themselves drawn into committing such offences for various reasons. For these individuals, any interaction with the police is likely to exist as an apprehensive experience, with the associated outcomes remaining central to that. Police officers themselves particularly highlighted the closely linked nature of procedures and outcomes and the way in which individuals endeavor to be informed of the outcome of their experience with the police *during* those procedures. However, it is not a decision ultimately made by those policing the roads and that is therefore not possible.

As police officers showed an awareness of this, the ability to offer education as an alternative to prosecution was used to their advantage in an attempt to improve interactions with members of the public, as PC Bob and PC Thomas describe:

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<sup>68</sup> This cannot be fully ascertained, as the penalty provided as a result of the conviction and/or age of the conviction is not known.

“If you get in with the speech, if you're speaking to them and tell them ‘you are going to process *but* there are options that negate them having points’, then I think that sort of softens the blow quite a lot, so yeah, they become quite receptive on that, and I think that eases the pressure on the officer a little bit in terms of at least they are giving them an alternative to what ultimately would be points on their licence.” (PC Bob)

“It’s a relief to them a lot of times when they realise they’re not going to get points and they realise this course is available to them, and I think in some ways they’re almost grateful to you that you are offering that to them... [it] makes for a better relationship with you and that person, certainly towards the end of that contact that you’ve had with them once, you know, that the course has been mentioned and it’s been explained to them. They are normally reasonably positive when they go away, if that’s possible.” (PC Thomas)

Often offered to offenders as an ‘opportunity’ to raise awareness, Crash Course is described as a fairer alternative to the penalties of fines or penalty points that would otherwise be received for the offences committed by those attending the course. The description of an educational course in this way allows it to be perceived as something that one would want to experience and that they should be grateful to be offered. It is a ‘second chance’ for those caught committing an offence to recognise the consequences associated with the behaviour and to cease committing the offence before being ‘penalised’ for the behaviour, even before that information presented within Crash Course has had any impact upon driver attitudes and behaviour.

The police officers interviewed appeared to show an awareness of this link between an offer of education as an alternative to prosecution and an enhanced perception of public satisfaction. It not only allows for a more relaxed atmosphere and is gratefully received by



offenders, as PC Thomas identifies above, but it also allows for an enhanced perception of the fairness associated with the procedure, highlighting the integrated nature of both procedures and outcomes. Beyond that police-public interaction itself, the ability to offer education as an alternative to prosecution was described by numerous police officers as an effective tool for maintaining a smooth working relationship with the public, as the following quote show:

“For me, it’s a good way of keeping a good working relationship between police and the public because we’re not going straight in for the kill, i.e., we’re not going straight for the prosecution, we’re giving them an opportunity, yes they may have committed an offence, but we’re giving them the opportunity to take our advice and put it right.” (PC Rob)

“You could give them a ticket for a mobile phone and they feel really hard done to and then two weeks later you could be knocking on their door asking for a statement because they’ve been a witness to a really serious offence, erm, and they could immediately have that negative perception of the police and think ‘well what did you do to help me? You’ve just give me three points on my licence, a big fine, you know, my insurance premiums are gonna go up, yadda, yadda, yadda’, and the end result is, they might not want to help us out by way of giving us that statement, or talking to us. Whereas if you can be seen to show a bit of leniency towards people, not leniency, that’s not the right word, but if you can be seen to be giving them something like Crash Course as an alternative to an enforcement policy then they may be more happy to help us out somewhere else down the line.” (PC Sean)

Although a single interaction with the police, regardless of its perceived fairness, may not override all previous perceptions of the police, as previously suggested, increasing the number of positive police-public experiences may provide a gradual enhancement in those

attitudes. PC Sean, above, did identify the ways in which roads policing has the ability to influence compliance and cooperation with the police more widely, supporting the proposed link from procedural justice to legitimacy and from legitimacy to compliance with the law made by Tyler & Fagan (2008). As contact with the police is most likely to occur through a traffic stop (Corbett, 2008), it is a vital situation in which to maintain those relationships that are at least somewhat characterised by trust and respect in an attempt to enhance perceptions of the police in general and therefore support for the work of the police and future cooperation. Where education is provided by those who have experience of such policing procedures, as Crash Course is, the possibility of maintaining and continuing that process of trust development, fairness enhancement and increasing overall perceived justice also exists.

This perception of fairness and explanations of education as a way of gaining support from the public was indeed repeated within interviews from offenders, as the following quotes show:

“He said ‘look, I can't promise that you will end up with a course, you might end up with points etc., but I will recommend that you go on the course because it's your first offence’, you know, he obviously checked, I gave him my registration and he checked that it was my first offence and on that basis he said that he would recommend that I would end up going through a course system rather than going through the courts and I was made aware of that.”

(Offender Debbie)

“He said they weren't, they weren't looking to charge anybody, they were basically just offering anybody that they caught the opportunity to go on the course to kind of raise driver awareness.” (Offender Mark)

“He did explain to me that it was a very worthwhile thing to do, while I might not be properly believing everything that he was saying, he recommended strongly that I give it a chance. Erm, and so yeah, I said ‘absolutely, I will’.”  
(Offender Keith)

The offenders continually described their attendance at Crash Course as a result of being ‘offered’ or ‘recommended’ such an ‘opportunity’, rather than linking it to any form of punishment or the offence that they had committed. Education in the form of Crash Course is consequently seen as, and even offered as, an *alternative to punishment* rather than an *alternative punishment*. The offenders interviewed particularly focused upon this notion of punishment avoidance, or that in being offered education, they had escaped more severe punishment.

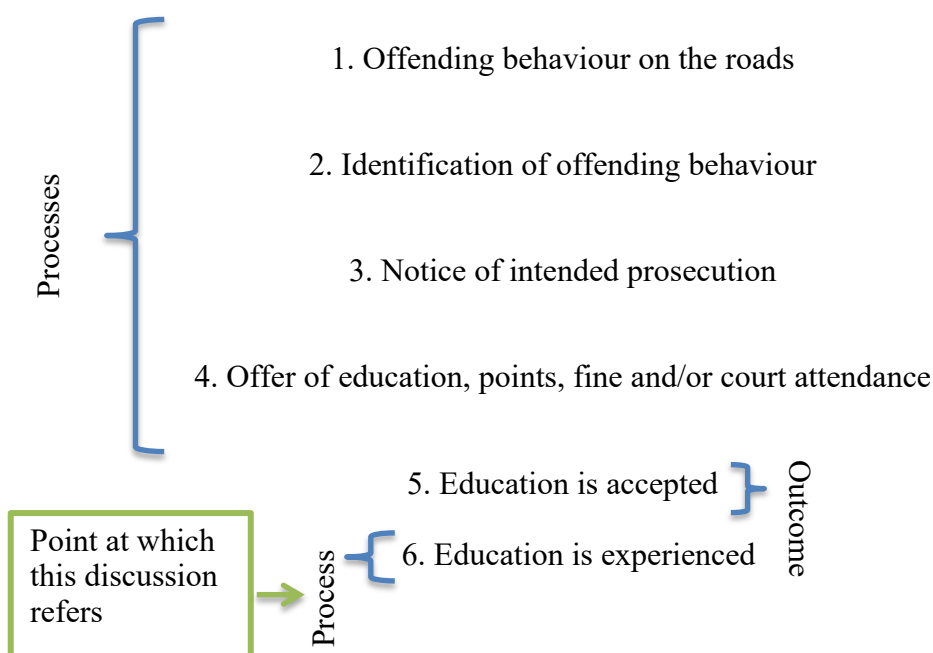
For police officers to be able to offer an alternative course of action that appears both more fair and just for otherwise law-abiding individuals, they are also able to be seen as understanding of that offending population. Accordingly, this explanation of the outcome was described as a way of improving the police-public interaction and its associated fairness. Not only does a perceived fairness or justness follow from the procedures leading to an interaction with the police, as procedural justice research often focuses (Tyler, 1988), the interaction itself is central to that. This importance of the procedures following identification of offenders and surrounding the provision of outcomes is likely to play a more considerable role in the existence of procedural justice than has previously been suggested.

## **12.6 Procedures of outcomes**

Further than focusing primarily upon police procedures, or the provision of outcomes, the ways in which outcomes are provided will be linked to an understanding of justice now (see figure 12.3 for a diagrammatical presentation of the stage at which this discussion

refers). The provision of education (in successfully procedurally just forms) has a clear ability to enhance perceptions of fairness and justice beyond the police procedures that procedural justice theory focuses upon. It has the ability to explain those police procedures, link police processes to legislation, explore the necessity of safe road user behaviour, and be provided in a fair manner. This potentially allows for an additional impact upon the perceived justice associated with policing and compliance through normative means. Thus, the outcome itself has the potential to be of great importance, despite a dearth of research exploring the ways in which education is experienced by offenders as an alternative to prosecution.

**Figure 12.3:** Diagrammatical presentation of chapter 12.6 procedural discussion



Crash Course in particular is a unique form of education in that it is delivered by those with personal experience in the consequences associated with the actions being discussed. As an outcome of an interaction between the police and the public in relation to offending behaviour, it therefore differs both from the alternative penalties and other forms of education in a way that allows that interaction with the police to be prolonged and

continued over an extensive period of time. Although interaction with the police begins at the point in which offending behaviour has been identified, it is continued through an offer of Crash Course as an educational alternative to prosecution. Further than this, it is continued still into that outcome itself, where those offenders are delivered education by police officers, amongst a range of other professionals.

Multiple quantitative analyses were conducted to explore this proposed notion of a continued form of justice system following attendance at Crash Course. Examining the pre-course and post-course questionnaire data, or that information gathered before attendance at Crash Course and immediately after course attendance, a significant increase in perceptions of police fairness for roads policing officers and the police in general is observed, as table 12.5 shows. These increases were examined for significance using t-tests, with a significant increase observed for all items across both groups of participants.

Before experiencing the course itself, the majority of individuals perceived their experience with traffic law enforcement to have been fair. The procedures associated with the police-public interaction, or the opportunity for procedural justice as it is generally theorised, therefore appear to have been relatively successful in ensuring a perception of fairness. Following attendance at Crash Course this further increased at a significant level, highlighting the integral nature of outcomes within perceptions of the police when considered in a context of roads policing. Particularly interestingly, perceptions of one's own experience with roads policing officers were influenced by an attendance at Crash Course, highlighting the interlinked nature of both procedures *and* outcomes, as well as the importance of the procedure associated with the outcome. Individuals appear to have revisited their experiences and reasoned the actions that occurred with this information in mind. The perceived justice of an experience with roads policing officers does not necessarily end when the police and offender depart, particularly where education such as Crash Course is used as an alternative to prosecution.

**Table 12.5:** Offender and employee perceptions of roads policing, general policing and personal experience of policing at pre and post course

<b>“To what extent do you agree or disagree with the following statements regarding the police...?”</b>	Pre - % agreed or strongly agreed	Post - % agreed or strongly agreed
<b>Offender group</b>		
The police enforce traffic law fairly (n= 200)	49.6%	75%***
In general, the police enforce the law fairly (n= 200)	57.2%	74%***
In my last experience with roads policing officers, the police enforced the law fairly (n= 198)	70.6%	86.8%***
<b>Employee group</b>		
The police enforce traffic law fairly (n= 120)	48.7%	60.5%***
In general, the police enforce the law fairly (n= 119)	55.5%	66.1%***
In my last experience with roads policing officers, the police enforced the law fairly (n= 60)	64.3%	75%**

\*\*\* Indicates significance at  $p < .001$ , \*\* indicates significance at  $p < .005$ .

In addition to this, perceptions of the police in general were improved following attendance at Crash Course, suggesting that education in this area is able to impact upon overall perceptions of the police rather than simply perceptions of one’s experience with roads policing officers. Education such as Crash Course therefore has much wider implications than has previously been given acknowledgement. When provided in an effective manner, it has the ability to enhance perceptions of the police, which in turn has been linked to an increase in compliant behaviour (Sunshine & Tyler, 2003). Rather than simply being an ‘easy option’ (RAC, 2017a), education may therefore actually be a tool of justice, from which individuals are able to learn about the processes and procedures associated with the

policing of the roads in a way that improves attitudes towards the police and cooperation with the police, as well as the behaviour itself<sup>69</sup>.

The way in which this information is presented within Crash Course is imperative to understanding the emotional and moral connection that course attendees are able to develop of the information provided, and therefore the link that such education may have to future intentions for behaviour via normative compliance. Within the course, Crash Course presenters not only describe their own emotional and personal experiences with traffic offending, but they discuss those of family members, colleagues and service users that have encountered the loss of another resulting from actions such as those that the course attendees have performed. Course attendees highlighted this as central to their experience and subsequent road user experiences:

“I think you do remember the faces, you do remember the atonement [sic] in their voices, you hear their voices change as they are relaying these stories to you. I think its visual and, you’ve got the voice in your head that doesn’t want to go away. You can hear it when you’re in circumstances when the weeks and months went by.” (Offender Kevin)

“I just felt that overall the dreadful, dreadful consequences of driving selfishly, when you think of the families whose lives are permanently changed, and they’re changed in a minute and a second, you know, life’s ticking along quite normally and reasonably, all of a sudden, you know, somebody’s gonna get a knock on the door and get some dreadful, dreadful news and it ruins their life. And it’s terribly selfish isn’t it?” (Offender Keith)

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<sup>69</sup> As outlined within chapter 6.

Within other educational road safety strategies, such real-life, thorough representations of the impacts of traffic offending are generally not presented (Fylan et al., 2006; Lonero & Mayhew, 2010; NDORS, n.d). Crash Course, however, uses emotional information to encourage drivers to realise how committing a single traffic offence can result in a number of consequences, impacting upon a range of individuals. This is enhanced by personal stories explaining the roles of emergency service workers, allowing for an emotional connection and vivid picture associated with the consequences of those actions. Kevin, above, suggests that information that is presented in such a way is easily memorable and has the potential to remain cognitively salient for an increased period of time than other forms of information that do not have such an emotional connection.

Not only do drivers appreciate the offer of education as an alternative to prosecution but they often also appreciate the information that the Crash Course presenters provide them with, doubly enhancing the relationship between the police and the public through education in this way. Being presented by those with experience in enforcement or dealing with death and injury as a result of those offences may enhance the perceived legitimacy, reliability and trustworthiness of such information and further add to the changes made to driver attitudes surrounding the police. The use of such professionals within education likely provides a greater link between the procedural justice of police behaviour and that of the outcome, bringing those potential benefits of a positively perceived, procedurally just notion of the police, such as increased cooperation with the police (Sunshine & Tyler, 2003) to the outcome punishment itself.

Hierarchical multiple regression analyses were conducted to examine to what extent perceptions of the police influenced intended future behaviour, and how evaluative perceptions of Crash Course influenced that. These analyses were conducted of post-course offender data. Preliminary analyses were conducted to ensure no violations in the assumptions of normality, linearity, multicollinearity and homoscedasticity (Pallant, 2013: 164). In terms of model development, overall perceptions of roads policing officers, one's



experience with roads policing officers and the police in general were developed from three questionnaire items enquiring into perceptions of fair law enforcement, decisions being made based upon facts and dignifying and respectful treatment<sup>70</sup>. Evaluations of Crash Course were developed from three questionnaire items relating to the thought-evoking nature of the course, the helpfulness of the course, and the effective use of real-life examples<sup>71</sup>. Future behavioural intention was a collation of questionnaire items relating to speeding, handheld mobile phone use, hands-free mobile phone use, and seatbelt use while driving<sup>72</sup>.

Table 12.6 shows the results of the regression, which indicated that the proposed model including overall perceptions of roads policing officers, overall perceptions of one's experience with roads policing officers, overall perceptions of the police in general and evaluation of Crash Course<sup>73</sup> accounted for 44% of the variance in future behavioural intention. Of these variables, overall perceptions of roads policing officers made a significant unique contribution when considered alone ( $\beta = .39$ ) but not when considered alongside additional variables in the final model ( $\beta = .05$ ). Within the final model, including all of the variables relating to perceptions of the police *and* perceptions of Crash Course as an educational course, those perceptions of Crash Course were the most significant factor predicting future intentional behaviour ( $\beta = .45$ ), although perceptions of the police in general ( $\beta = .39$ ) also added a significant explanatory value.

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<sup>70</sup> These variables existing as the following questionnaire items: To what extent do you agree or disagree with the following statements... the police enforce the law fairly; the police make their decisions based on facts, not personal biases or opinions; and the police treat people with dignity and respect.

<sup>71</sup> These variables existed as the following questionnaire items: Do you agree or disagree with the following statements about your experience of Crash Course... Crash Course really made me think about my behaviour on the road; the information provided was very helpful; and the use of true, real-life examples was effective.

<sup>72</sup> These variables existing as the following questionnaire items: To what extent do you agree or disagree with the following statements regarding your driver behaviour... in the future I will always obey speed limits; in the future, I will always avoid using a handheld phone while driving at all times; in the future, I will avoid using a hands-free phone while driving at all times; in the future, I will wear my seatbelt at all times while driving.

<sup>73</sup> These statistics were all collected from post-course questionnaire data.

When the model includes perceptions of Crash Course as well as perceptions of the police, it is those perceptions of Crash Course that play a more significant role in explaining future intentional behaviour. This novel finding suggests that education plays a multitude of roles within the area of traffic law enforcement<sup>74</sup>.

**Table 12.6:** Summary of multiple linear regression analyses for variables predicting intended future behavior (post-course)

	Model 1 (β)	Model 2 (β)	Model 3 (β)	Model 4 (β)
Perceptions of roads policing officers	.39***	.46**	.16	.05
Perceptions of personal police experience		-.10	-.13	-.2
Perceptions of the police in general			.37	.39*
Crash Course evaluation				.45***
Age	.04	.04	.04	.01
Gender	.22*	.23*	.24*	.16
Ethnicity	.05	.04	.04	-.01
R <sup>2</sup>	.25***	.26	.28	.44***
N	100			

Table displays standardized beta values (β).

Dummy codes – Age (0 = below 30, 1 = 31+), gender (0 = male, 1 = female), ethnicity (0 = white ethnicity, 1 = other ethnicity).

\*\*\* Indicates significance at  $p < .001$ , \*\* indicates significance at  $p < .01$ , \* indicates significance at  $p < .05$ .

<sup>74</sup> The statistics relating to this regression analysis were collected within three weeks following attendance at Crash Course. A lack of response at six-month follow-up failed to allow for meaningful conclusions concerning the longevity of this benefit.

Although the procedures associated with an individual's personal experience with roads policing officers were described as important throughout the interviews, by both the police and course attendees, these analyses from the questionnaire data particularly highlight the importance of the outcome in relation to that experience, and indicate that personal experience actually explains less variance in behavioural intention than overall perceptions of roads policing officers and the police in general. This supports previous research that has suggested a single encounter with the police is not able to considerably influence perceptions currently held by individuals of the police (Skogan, 2006).

Interestingly, perceptions of the police in general also explained a significant proportion of the variance in intentions for future behaviour on the roads, where those perceptions of roads policing officers did not. This may, in part, be due to the fragmented and reducing visible nature of roads policing officers, as is currently being observed following a reduction in funding (Johnston & Politowski, 2016). These findings may also be indicative of a more general link to law enforcement whereby behaviour is dependent upon a perceived moral link between the law/legal system as a whole and compliant behaviour rather than any specific focus upon punishment associated with a particular environment.

## **12.7 Summary**

Through questionnaire and interview data, trust, respect and voice were highlighted as essential components of a perceived procedurally just experience with traffic law enforcement, supporting previous work of Tyler (2006) and Hinds and Murphy (2007), for example. Despite this, a distinction was made between procedural justice as observed in the general actions of the police and procedural justice regarding one's own encounter with the police. An individual's own experience with roads policing officers was intrinsically linked to a comparison of the treatment of other individuals. Thus, procedural justice may be better understood as existing in more than one form, whereby procedures in general and

procedures of one's own, in comparison to that of others, can form two distinct notions of justice.

A distinction was observed between legal, institutional and individual legitimacy whereby the police as individuals were described as fair and supportive of the situation in which individuals were identified as offenders, despite perceived unfair institutional practices or laws. Perceptions of fairness and justice associated with an individual's most recent experience with roads policing officers were significantly higher than those regarding roads policing officers and the police in general, supporting the proposition that that a single positive encounter with the police is unable to eradicate all negative perceptions of the police obtained from other sources (Skogan, 2005; 2006).

In addition to procedures being central to perceptions of justice associated with traffic law enforcement, the description of the outcome was also described as central to overall perceptions of fairness, highlighting the importance of outcomes *within* procedures. The ability to offer education as an alternative to prosecution and present it as a positive alternative to penalty points and fines further enhances the relations between the police and the public in various ways. Alongside this importance of *outcomes within procedures*, the importance of *procedures within outcomes* was also described as being of significance to the overall experience of law enforcement, or the way in which education is presented in the form of Crash Course. To be informed of the reasoning behind the necessity of traffic law enforcement in an emotional format, from the perspective of those with credibility in the areas, had considerable benefits for perceptions of fairness associated with the policing of an individual's own behaviour. Not only did education in this form enhance a public understanding of the need for normative commitment, but it also enhanced perceptions of the police. This suggests that education as a road safety strategy has the potential to improve the perceived procedural justice surrounding police-public interaction more widely than has previously been highlighted.

### **Conclusion to part three**

Throughout part three of this thesis, a range of concepts and theories have been used to explain the contemporary issue of mobile phone use while driving. Primarily, three concepts were used and provided considerable explanatory value in understanding why individuals use mobile phones while driving and why difficulties have been experienced in attempts to tackle the behaviour – ‘acceleration’, ‘risk’ and ‘procedural justice’.

The first of these, ‘acceleration’ (Rosa, 2003; 2013), highlights the importance of time and speed in contemporary society. According to a number of theorists, many areas of life are being experienced at an increasingly fast-paced speed, allowing for less time for enjoyment and reflection (Koselleck, 2004; Wajcman, 2008; Rosa, 2013). Work, family and even leisure time all fall under this category of accelerated areas of life. Developments in technology, which at first glance appear to support this need for speed, and indeed have allowed more to be completed in less time, have only enhanced societal expectations that more should be completed on a daily basis. According to Rosa (2013), individuals are expected to ‘do more’, ‘be more’, and ‘have more’ to appear successful today. Consequently, life is described as more rushed, pressured and ‘full’ than ever before (Wajcman, 2015).

Secondly, risk and safety were discussed, with a particular focus on the ‘risk society’ thesis proposed by Beck (1992). This ‘risk society’ describes a concern with hazards resulting from the production and spread of science and technology during the process of modernisation (Beck, 1992). Individuals and groups show concern for risk in varying ways, and may attempt to control risk through efforts to measure and/or manipulate it. For example, political efforts have been made to develop laws that govern risky behaviours whilst individuals may buy security cameras to reduce their personal risk of harm. Despite this concern for risk, by its very nature, risk is difficult to understand, manipulate and control. Whilst the risk society described by Beck is focused upon actuarial or statistical

notions of risk, risk also exists in cultural contexts that differ between individuals, groups and environments (Douglas, 2003), creating difficulties in making simple measurements or devising methods of manipulation in relation to risk. Consequently, legislation based upon actuarial notions of risk are flawed when experienced within a ‘real-life’ cultural context.

Finally, ‘procedural justice theory’ (Tyler, 1988; 2006) was discussed in terms of police procedures being central to eliciting normative compliance, or compliance with the law resulting from a moral belief that it is the ‘right’ thing to do (Tyler & Fagan, 2008). Whilst this is useful in comparison to instrumental forms of compliance that rely on a fear of punishment, and therefore police presence and offender identification, it is not necessarily easy to develop in the context of roads policing for a number of reasons. Principally, the nature of strict liability laws fails to allow for a moral connection between that law and an individual understanding of the ‘right’ thing to do. Combined with reductions in police funding (Johnston & Politowski, 2016), this makes it difficult to elicit compliance with traffic law.

Combined, these concepts and/or theories are complemented by notions of identity and uncertainty that reinforce strands of each of them. The amount of time that we have to complete tasks is uncertain, as is the development of technology and its associated risk. The moral link with laws based upon *mala prohibita* philosophies that particular behaviours are punishable simply because they are prohibited is also indistinct as individuals show an uncertainty in understanding why the law exists in the way that it does. Furthermore, individuals continue to highlight an importance in defining ‘who’ they are, with the mobile phone and its use, even within vehicles, playing a primary role within that. Not only can individuals be ‘law-abiding’, but they can be ‘doting parents’, ‘caring friends’, and ‘productive employees’, with that identity playing a central role in decisions to use (or not to use) a mobile phone while driving. As social change is experienced, individuals are

expected to adopt a level of reflexivity with their identity (Giddens, 1991), ensuring that even identity itself is not a certain or single existence.

Although both the mobile phone and the vehicle have ensured that tasks can be completed quicker, destinations can be arrived at faster and work can advance more speedily, their known risk has been largely masked by these apparent benefits. As the technologies associated with mobile phones and vehicles, and even mobile phones within vehicles, increase in prevalence, individuals become increasingly uncertain of what is risky and what is not. Interviews with individuals attending a driver education course highlighted this. Alongside this, time spent driving is almost seen as 'wasted' (Lyons & Urry, 2005: 8), slowing other forms of progress down due to its time-consuming nature. The temptation to continue accelerating during this form of 'deceleration' through the use of a mobile phone while driving therefore only increases as societal expectation to 'do more' increases. Both questionnaire and interview data highlighted that the greater amount of time spent driving, the more likely individuals were to use a mobile phone while driving, supporting this notion of 'acceleration'. There is more time to be saved for those individuals who spend more time driving, and a greater temptation to do so, or greater loss if an individual does not.

It is not only the societal pressure to do more, but also the pressure to 'keep up' with others that encourages mobile phone use while driving. Identity is central to this notion of 'keeping up', and therefore to 'keep up' means different things to different people. For some, it is most important to remain up-to-date with changes in a social group, making social media an attractive avenue, whereas for others it is essential that the safety of their children is ensured at all times, resulting in a phone call from a child being highly likely to be accepted. That identity of precedence at any given time may change in a society requiring reflexive identity, ensuring that one phone call, text message, or social media update may be important to one person in a given situation but not important to another, or even to that same person in a different situation. With the increasing functionality associated with the developing technologies of mobile phones, these possibilities also

continue to increase, making it more and more difficult to police the offence of using a mobile phone while driving.

Where the police are seen to 'target' mobile phone use while driving that has resulted from an 'important' call, relating to any of these forms of identity, they are also risking their perceived legitimacy and fairness being reduced. Individuals showed an understanding of such policing but were not always satisfied that their behaviour was deemed an offence, and their 'law-abiding' identity was questioned. In addition to this, where the law is not fully understood, that legitimacy and fairness is further attacked as individuals struggle to morally identify with laws that define them as 'offenders' despite no intention to cause harm, or even sometimes no intention to break the law. The development of technologies that are not fully understood in terms of risk makes this increasingly difficult as the law is based upon those devices that are continually changing. Even the police struggle to identify certain behaviours that may be considered offences, with the law not having changed since its implementation in 2003 but technology having changed considerably since then. This makes it ever more difficult to attempt to create notions of procedural justice and encourage normative compliance with the law.

The law in itself, when based upon notions of risk, competes with other aspects of the accelerating world, and makes it almost impossible for the police to be deemed fair and legitimate given the behaviours that they are expected to police and the ways they are expected to police it. Education, as an outcome of that police-public encounter, however, has the potential to improve perceived fairness and justness, continuing to be of importance within a roads context in which these strict liability laws exist. The benefit of such education has previously been underestimated, shown here to expand beyond the ability to offer an 'alternative to prosecution' as what may be perceived to be an 'easy option', to benefitted police-public relations. The use of education as an alternative to prosecution, when provided in particular ways and utilising policing professionals effectively, has the ability to prolong that interactional process and even enhance the perceived fairness of an



interaction with the police. This has implications for offending behaviour and has the potential to somewhat tackle the social and cultural barriers to preventing offending on the roads.

## **Chapter 13: Thesis conclusion**

### **13.1 Introduction**

This thesis has presented a range of information, assisting in developing an exploratory understanding of mobile phone use by drivers, including how and why the behaviour continues to exist, as well as how successful (or otherwise) strategies to tackle its prevalence have been. To provide this understanding, it was necessary to critique the law surrounding the offence, highlighting issues with the development of risk-based legislation in a postmodern world surrounded by developing technologies and possibilities for communication. Following this critical evaluation, it was possible to consider how and why strategies to tackle the behaviour have been met with resistance, and failed to eradicate the problem behaviour. Particular attention was paid to one educational strategy and its attempts to tackle mobile phone use while driving. From this, a range of issues associated with the contemporary nature of life and the policing of a risk-based law were identified, allowing for an understanding of the behaviour and difficulties in reducing its prevalence.

This final chapter outlines the primary findings reported throughout this thesis and their implications. It briefly describes the complications associated with the law as it currently exists, how education can and should be used as a road safety strategy and areas of life that make attempts to tackle mobile phone use while driving more complicated. Finally, this chapter will end with a discussion of the theoretical and policy implications surrounding the research findings presented within this thesis.

### **13.2 The problem of postmodernity**

Mobile phone use by drivers is a growing problem in contemporary society – it continues to be observed in drivers, as has been described throughout this thesis, and found by others (RAC, 2017b). This is despite the provision of various strategies to tackle the behaviour,

ranging from penalty fines to campaign education (DfT, 2016b; Think!, n.d.b), and an apparent social disapproval of its existence (RAC, 2017b). An increase in penalty points and fines associated with the offence is unable to act as a fully effective deterrent when 54% of drivers believe they are not likely to be caught or punished using a mobile phone while driving (AA, 2018) and reductions in policing numbers continue to be observed (Johnston & Politowski, 2016). These preventative strategies and social perceptions of the offence have not been enough to eliminate the behaviour when experienced within the society in which we currently inhabit.

The behaviour of using a mobile phone while driving is symptomatic of postmodernity and the various challenges it poses, highlighting how the use of technology to advance productivity, identity reflexivity and personal satisfaction overrides in importance the risk associated with such an action. Individuals are now expected, not only to do more in less time, but also to be more and have more (Rosa, 2003). It is important for individuals to present *who* they are through *what* they have, *what* they do, and *where* they go in a postmodern world. At least this is what is needed for individuals to successfully ‘accelerate’ through life in postmodernity (Rosa, 2013). Where they fail to achieve this, individuals may find themselves decelerating, or even reversing in social life, whilst others overtake and enjoy the benefits of ‘succeeding at life’.

The use of a mobile phone is one such way that this acceleration can take place – individuals can ‘be’ anywhere with the touch of a button, communicating with any part of the world. They can also perform a range of activities, from playing a game to writing a book; the mobile phone provides the capabilities to ‘do’ so much. Finally, individuals can not only purchase or ‘have’ everything that they want using a mobile phone, they can also depict ‘who’ they are, developing identities through the use of social media, messaging, working, caring, etc. and even choice of handset and accessories. The possibilities continue to grow every day. Still, individuals are expected to ‘keep up’ with that ever-growing number of possibilities. This is characteristic of postmodernity – providing unlimited

opportunities with the expectation that individuals achieve them all. Whilst impossible, the desire to 'win' the game of life is too tempting not to try, and the consequences of *not* trying are too severe to give up.

Consequently, 'life' creates temptations for using a mobile phone. It is simply one tool that can be used to advance possibilities of acceleration within personal, social, and working areas of life, or at least to reduce the deceleration process. Individuals can contact family members, they can keep in touch with friends across the world, and they can complete work or even update diaries. The benefits of using a mobile phone are not constrained to a single area of life, rather they permeate into all areas. Simultaneously, those aspects of identity associated with a mobile phone permeate into all areas of life and cannot be avoided, or cannot sufficiently and credibly be ignored when such technologies allow for possibilities to define who we are at every second of the day.

It is of no surprise then, that the attraction to use such a device continues when individuals are in vehicles, whether as a passenger or driver. Whilst interviewees highlighted within this thesis the apparent benefit of speeding on saving time, this offending behaviour was also described as an unfulfilled promise, that failed to effectively provide that acceleration required in life. A saving of five minutes on an hour journey is not deemed a beneficial opportunity upon reflection of the offending behaviour. Whilst this may be true of speeding, however, the ability to use a mobile phone for the entirety of a journey, or even to use it when traffic jams and lights fail to allow for an individual to exceed the speed limit, only further enhances the attractive nature of mobile phone use while driving.

A mobile phone can be used at any point of a journey, for a multitude of reasons, regardless of other forces of deceleration that are imposed upon individuals. Acceleration, or progression, can be continued, even where it is not physically possible to do so. The attraction of using a mobile phone while driving only enhances as technologies continue to develop and allow for additional possibilities to accelerate in a society that is concerned

with doing more, seeing more and being more. Remaining 'safe' is often unable to overtake in importance these desires to keep up with others and be the best we can be.

### **13.3 The uncertainty of safety and legality**

Not only does this accelerated nature of postmodernity make it difficult for individuals to 'keep up', and encourage them to use a mobile phone even in contexts such as that of driving, it also blurs an understanding of what is risky and not, what is dangerous and safe, what is legal and illegal. What is even more concerning, as identified throughout this thesis, is that individual drivers are not the only victims of such difficulties; police officers themselves also struggle to identify what is an offence, what is safe and what is not. Everybody is at risk of failing to understand risk in postmodern society (Beck, 1992). Various aspects of postmodernity influence this failure to sufficiently understand risk, ranging from the speedy nature of the development of technology, to the mass so-called 'expertise' that provides contradictory and confusing information.

As technology can develop faster than legislation within postmodernity, the law is consequently unable to advance as fast as technology or those possibilities for behaviour that surround technology. As individuals struggle to 'keep up' with social change (Rosa, 2013: 84), governments, legislators and police forces struggle to 'keep up' with technological change. Whilst actuarial notions of risk as predictable and objective statistics have been used to develop legislation, those risks themselves do not exist in a cultural or social vacuum – they indeed can be manipulated, changed, or influenced by an array of factors, with the development and use of technology in varying ways being one of those.

Mobile phone use while driving is one such example; the law was developed in 2003 but continues to be used today. There are clear limitations in attempting to apply a law that is 15 years old to a device that individuals change frequently to suit the changes in technology or fashion that they provide (Venkitachalam et al., 2015). This law is insufficiently able to

account for the capabilities of a mobile phone today. Calling, sending a text message and weak 2G network signals were all that was possible in 'hi-tech' phones of 2003 (Ofcom, 2004; Agar, 2013). This compares to today's phones that can be used as messaging devices as well as diaries, cameras, maps, alarms, newspapers, health checkers, sound systems, books, and beyond. For it to be an offence to 'use' a mobile phone while driving, is now something very different to that which it once was, as mobile phones can now be 'used' in so many ways.

For example, 'use' could mean simply to touch, it could mean to hold, or it could mean to perform some function. Many mobile phone applications now allow a driver to perform tasks using hands-free technology, although they require some 'use' of the phone in order for that task to be completed, activity to be conducted or function to be performed. A level of uncertainty and confusion surrounds acts such as moving a mobile phone from one side of a car to the other when no interactive function is being adopted or simply observing a phone, such as looking at a phone to see who is calling. Whilst these actions could be considered 'use' of a phone, it is not clear whether they are deemed 'use' within law.

In addition to this, the development of other similar technologies such as tablets and smart watches further complicate an understanding of what is a phone or 'communication device' (The Road Vehicles (Construction and Use) (Amendment) (No. 4) Regulations, 2003) and under what circumstances they are being used. A watch may be worn, rather than held, and therefore does not appear to be considered within law, but that does not mean that the device is 'risk-free'. As research has identified the cognitive distraction associated with phone use while driving as being the primary distracting factor (Caird et al., 2008; Strayer et al., 2011), those actions that are performed hands-free continue to be a risk to safety. Still, legislation regarding the offence has not been updated to reflect these changes in technology and our understanding of their distractive capabilities.

The law, as a supposed guide to behaviour, does not even, in this case, remove the primary risk associated with mobile phone use while driving. Cognitive distraction *is* legally allowed through various forms, in particular that of hands-free mobile phone use while driving. Even if an individual believes that they are able to understand the law and act legally, that does not necessarily equate to safety. Risk is complex and difficult to understand in a postmodern society of increasing technological development and change (Beck, 2006).

This is further confused by the vast amount of information that an individual may encounter in relation to ‘safe’ driving. Whilst legislation, which may be envisaged as a trustworthy and reliable ‘expert’ source, suggests the risky nature of handheld mobile phone use while driving, it simultaneously suggests the safety of hands-free use, by not legislating against its use. This is only furthered by vehicle manufacturers who describe hands-free mobile phone use as a safer and legal alternative. Volkswagen claim that their in-car hands-free mobile phone technology allows drivers to “make hands-free calls, safely and easily, while you're driving.” (Volkswagen, n.d: 1). Such devices are promoted as “help[ing] drivers focus on the road” (Bluetooth.com, n.d: 1) and “avoid the penalties and drive safe” (Halfords, n.d: 1) – associating risk with ‘legal risk’ and not ‘personal risk’. This is in contrast to the less readily-available research literature that has shown the risks associated with hands-free mobile phone use while driving (Strayer & Johnston, 2001; Strayer et al., 2003). It is difficult for individuals to recognise where to turn to collect useful and reliable information in such an ‘information society’ (Webster, 2014) that is experienced today.

#### **13.4 Struggles and strategies to elicit compliance with an uncertain law**

These issues surrounding risk-based legislation also spill into the realm of policing, and encouraging compliant behaviour. Normative compliance, or a compliance based upon the moral belief that the law should be obeyed or particular behaviours should be performed (Jackson et al., 2012a), enhances the likelihood that individuals will comply with the law

on their own accord, without the necessity of police officers identifying offenders. This is essential in a time of such economic austerity, with a considerable reduction in roads policing officers having recently been observed (Johnston & Politowski, 2016; AA, 2018). It is no longer possible to expect compliance through these instrumental means of identifying offenders and punishing their illegal behaviour where it is not physically possible to do so. Instead, encouraging a normative commitment to the law allows for a more suitable financially-situated form of compliance. This form of compliance also encourages behaviour that does not form part of law, allowing hands-free mobile phone use while driving, as a risky action, to be tackled.

However, this compliance is not simple or easy to elicit when it relates to a law that can be underestimated in its ability to identify risky behaviours and define what is and is not legal. Individuals are less likely to agree with the moral basis of a law that has flaws and is insufficiently able to keep individuals safe. In addition to this, the lack of *mens rea* associated with many traffic offences, or the lack of any identifiable victim/harm, further limits the moral bases of that law. Thus, it becomes difficult for individuals to develop a moral connection with a law that does not appear morally-based in itself. Where this moral link is weak, it is likely more easily broken by those aforementioned desires of connectivity, speed and progression that make the use of a mobile phone while driving evermore tempting. Furthermore, encouraging a normative commitment to refraining from using hands-free devices while driving is difficult where expert advice is contradictory and confusing. A moral alignment to behaviour is difficult to produce and maintain in a postmodern world of ambiguity, equivocality and change. Again, it becomes increasingly easy for 'life' to overtake in importance the morality of such a behaviour.

Morals can also be linked to the importance of being a 'responsible parent' or 'reliable friend' – identities that are increasingly impossible to have a valid excuse to temporarily damage. It is no longer reasonable to fail to reply to an important message from a child or friend, or to ignore a call from an employer. Physically, the possibilities are there, and



morally, they are increasingly seen as difficult to ignore – surely it cannot be morally justified to knowingly ignore several calls from a child home on their own? As communication creeps into increasing areas of life, that importance of remaining socially connected does too, as well as the essentiality of maintaining identities in various areas of life, or the moral implications of not doing so. An individual no longer simply becomes an employee once they enter the doors of their workplace – they remain a parent, a friend and a lover through the connectivity of a mobile phone. They are never far away from the technological device that allows them to maintain the identities that relate to such existences, making it increasingly difficult *not* to do just that. Within the vehicle, an individual no longer simply becomes a driver – they also remain an employee, a gossip guru or gaming champion. Whatever those identities that can be performed outside of the vehicle, they can also be maintained within the vehicle through the use of a phone. Alternatively, they can be rejected, risking their future as well as the personal moral links to that.

Where road safety strategies fail to effectively tap into the importance of these aspects of an individual's life, they are failing to embed themselves in the information that is used to inform behavioural decisions on the roads. For example, although penalty points may be considered relevant to the lives of some people due to their relation to working life, that is only likely for those who place an importance on their driving licence or require a 'clean' licence free of penalty points for employment and therefore financial security. For others, however, penalties such as these are likely failing to encourage safe behavioural choices on the roads as they are not strongly related to the efficient operation of daily life. Furthermore, they rely on an instrumental compliance with the law, which has been recognised as insufficient in the current policing economic climate. Where individuals do not fear being caught, *and* the penalties associated with being caught are believed to be insignificantly impactful upon an individual's life, compliance is unlikely to be sought in this way.

In contrast, education is potentially able to embed itself into those important elements of an individual's life – it can be explained in terms of financial penalties, personal consequences, employment costs and even in terms of the impacts upon identity. Where penalties such as points and fines provide some deterrent to offending behaviour, they do not detail the offence and the moral reasoning for its existence. In contrast, education *is* able to do that. It can give explanations for legal decisions and also outline those risky behaviours that should be avoided, providing an emotional and moral reasoning for suggested changes to behaviour. This range of consequences associated with the behaviour are more likely linked somehow to an individual's life and their priorities within life, or the information within their life that is used to inform behavioural decisions. It is in this way that education should be harnessed in supporting those other road safety strategies.

The importance of the presentation of such educational information should not, however, be underestimated. It was perceptions of Crash Course as a driver education course that were found to be the most significant factor in explaining future intentional behaviour. Although police procedures and legislation were described as playing a considerable role throughout the interviews, quantitative data highlighted the importance of receiving education that is perceived to be relevant, informative and contains real-life stories (suggesting the combined importance of fair enforcement and meaningful education). This form of education also appeared to play a role in improving perceptions of an individuals' personal experience with the police, even weeks after that encounter had taken place. This is a novel finding that shows how drivers respond to the use of education as a road safety strategy, and the importance it is potentially able to have upon road user behaviour.

Further than this, education can be changed at a significantly faster rate than legislation. It is better able to 'keep up' with changes in technology and the risk associated with those changes, allowing it to act as a successful tool in aiding the law as well as a road safety strategy when used alone. Education does therefore have a 'place' as a strategy for tackling mobile phone use while driving – when used as both a form of general and specific

deterrent. It has the *potential* to be used in ways that benefits more than simply an understanding of the law and should not be perceived as an ‘easy option’ that is not ‘harsh enough’ to be offered in relation to the offence of using a mobile phone while driving (RAC, 2017a) – the political risks associated with the action and responses to it.

Time, employment and social pressures are not easy to alleviate which is why education must work alongside technological, engineering and enforcement strategies to minimise the likelihood that these daily pressures take precedence in behavioural decisions on the roads. Education alongside changes within the law, particularly surrounding legal, hands-free devices, would allow for a much greater understanding of the risk associated with those actions, as well as the importance of such legislation. Whilst these would continue to compete with cultural notions of risk surrounding the use of a mobile phone while driving, attempts should be made to encourage a cultural shift whereby individuals are stimulated to believe that ‘driving time is driving time’, not ‘wasted time’ or ‘time spent multitasking’. Vehicle manufacturers can assist educational efforts by reducing the number of actions that can be performed within a vehicle alongside the task of driving, ensuring that multiple organisations must work together to provide an effective response to mobile phone use while driving.

### **13.5 Theoretical and research implications**

Throughout the thesis, three primary theories have been used to explore mobile phone use while driving; how it exists on the roads, how it is policed, why it remains highly prevalent and why strategies to prevent its use have been somewhat unsuccessful. In particular, the theory of ‘acceleration’ (Rosa, 2003; 2013) has proven highly useful in exploring actions on the roads and the reasoning behind individual behaviours from a wider social context. It is not a theory that has been widely applied to areas of criminology and should be considered more frequently as a theory which is able to explain behavioural choices within criminology, psychology and sociology, combining cultural understandings of reality with

behaviour as it occurs 'in real life'. Here, it has allowed for a discussion of the competing interests that individuals endure on an ongoing basis, and has begun to highlight how resistance to some forms of enforcement, engineering and education is developed as a response or even 'need' to deal with those competing interests; what may initially be considered an 'obvious' or 'simple' response to tackling a problem behaviour can be denied its ability to succeed where the social and cultural context in which that response is provided does not support its existence.

Combining this theory with literatures surrounding risk and procedural justice have also been useful in developing this wider perspective, highlighting the importance of multidisciplinary approaches to understanding offender behaviour. Indeed, risk is deeply embedded within notions of social acceleration and interpretations of individual progression, satisfaction and success. However, what may be considered an objective risk in reality may not be considered such when understood within the cultural context in which it actually exists, and some risks are of course competing with alternative risks, requiring individual to choose which 'risk' to take. These risks do, sometimes, become illegal behaviours, where the risk associated with committing an offence is perceived as lower or less relevant than the risk of deceleration, missing out, or simply the risk of not being able to 'be who you are'. Procedurally just actions within police work (whether that is through the form of enforcement or *education*) become evermore important when we consider human action in this way, as perceptions of fairness and legitimacy may become part of 'who you are' and influence individual, social and cultural notions of risk through these means. This comprehensive theoretical approach allows for a deeper and more meaningful understanding of *why* behaviour exists as it does, and here explains more in terms of mobile phone use by drivers than has previously been explained.

From the thesis as a whole, it is easy to conclude that more research is needed in the area of road safety and roads policing, and in particular in relation to the offence of using a mobile phone while driving. Such research has real-world applications to saving lives and

is therefore paramount to both theory and policy. Conducting additional research will not be without complications nonetheless, as have arisen within this project and is very much the nature of conducting research in the ‘real world’.

A lack of post-course data within this research project likely reflected not only the emotional nature of the information presented, but the everyday issues surrounding time that individuals experience (Rosa, 2003). Giving up time, that has been described throughout this thesis as being so precious to individuals, for research purposes, is difficult to engender. Attrition at six-month follow-up supports this; as individuals are again embedded within social life that reminds them of the importance of time and productivity, the attraction of participating in ‘research’ that has little meaningful relevance to them or their personal acceleration in life is limited.

This simply reinforces the arguments presented throughout this thesis that mobile phone use by drivers is simply one lens through which we can explore postmodernity and its complexities. Similarly, technology continues to advance, even during the period of research projects, as is impossible to avoid given the nature of ever-developing technology in contemporary society, making it difficult to ‘keep up’ with those changes in terms of conducting research and understanding their use. This is a limitation that such research should be aware of, but it should not limit research itself. Researchers and academics should continue to highlight the importance of such research, and encourage participation in research that has such real-world applications, that *can* be relevant to their personal lives.

### **13.6 Policy implications**

This thesis has provided several implications for policy, and has even already extended in importance beyond the realm of academia. A report has been written presenting part of the results of this thesis for the police force from which the participant pool was provided. This report was well-received by that police force and shared by them with the head of road

safety matters at the DfT. This took place prior to the increase in penalties associated with the offence of using a mobile phone while driving to ensure that it could be used to inform decisions made regarding the future of the offence and the relation that education had to that. This highlights the importance of research such as that presented throughout this thesis and its contemporary relevance and importance within road safety matters now, as well as the reach that it has already had even prior to publication of all results.

Part of those results have also been presented within conferences attended by the researcher, including the International Conference on Traffic and Transport Technology, and within an article published in the *Journal of Criminology and Criminal Justice*. This has allowed professionals working within various fields of road safety to be introduced to the research and informed of some of the results. The research has therefore already had a considerable reach. In addition to this reach that has already been achieved by the project, there are many implications that have been developed and will be reported here.

Firstly, education does indeed have a valid reason to be used for the offence of using a mobile phone while driving. It has proven positive in many ways here and when the most successful elements of education (using this thesis as well as meta-analyses and reviews provided elsewhere) are provided alongside each other, education is likely to act as a significant road safety strategy for the offence of using a mobile phone while driving. Rather than suggesting that education is not used as an alternative to prosecution for the offence, police forces should be encouraged by government to use education in particular ways that have been found to be impactful upon driver behaviour. If not as an alternative to prosecution, then as some other form of education with the public, whether that is through face-to-face engagement, social media engagement or other means. Education can work *with* a range of other road safety strategies and, when afforded regular evaluative research, can be expanded upon and developed sufficiently. Indeed, this combination of strategy should be encouraged to present a uniform front to tackling the issue.

Secondly, and to form an effective combination of strategies, legislation surrounding mobile phone use while driving *should* be revisited and revised. It is currently ineffective in describing the reality of in-car communication and distraction and does not act as a successful tool that individuals can refer to in making behavioural choices. Legislation should act as a clear guide that individuals, both drivers and police officers, can understand clearly - the law must change *with* risk if it is to attempt to reduce risk. This is a difficult task but should also simply be acknowledged as necessary given the nature of risk-based legislation that creates possibilities for strict liability law and requires individuals to comply with such law. This is the only way that the law can be seen as a credible and valued expert that should be referred to in behavioural decision making. Currently, the law can be undermined by other self-certified ‘experts’, and even individuals who think they have the expertise to guide their own behaviour and the behavioural choices of other people. Legislative documents, government officials and police forces need to reclaim this expert status by ensuring that they remain up-to-date with changes in technology and that those changes are reflected within legislation that is explained to all road users and enforcers of the law.

The law must be amended to suit progression in the technologies that it attempts to control in order to remain effective, and potentially enhance possibilities for normative compliance. Alternatively, a new law must be developed in which the changes observed since 2003 are accounted for, the distractive abilities of various technologies are discussed and definitions of key terms are explained in detail. A law of ‘technological distraction’, would allow for the possibility to encompass a range of actions and technologies rather than restricting the offence to ‘use’ of a ‘handheld mobile phone’. This would allow actions such as the use of hands-free devices, and even in-vehicle devices when used inappropriately, to be policed more effectively. Although visual observation of those offences may be more difficult, when combined with effective education explaining the terminology used and moral reasoning underpinning such legislation, an offence of technological distraction would likely prove more beneficial than that currently afforded

of 'mobile phone use while driving' as an underpinning message of the unacceptability, illegality and also dangerousness of distraction through technology while driving (rather than the questionability of the legality of some actions, complication in understanding some definitions and lack of knowledge of the danger of some actions, that the current way of working inadvertently provides).

Finally, various groups of individuals need to work together in order to experience the most successful improvements in road safety. Manufacturers should work with the government and the police to ensure that the technologies increasingly being made available within vehicles are not conflicting with the work of the government and police forces in their attempts to improve road safety. Manufacturers should be expected to play a more central role in developing an understanding of risk and the potential harm associated with technologies within vehicles. They should also be expected to hold some responsibility in improving road safety through a reduction in driver distraction. They therefore also need to work closely with academics and engineering professionals who are able to assess the potential risk associated with their developments prior to them being made available to the public.

Employers should be encouraged to work with the police to encourage road safety, particularly in fleet workers but also in other employees who perceive the time pressures associated with the accelerated society explained in chapter 8. This would allow a range of individuals to be presented with the information included in education such as Crash Course, potentially tackling the issues underlying mobile phone use while driving rather than simply informing individuals of the law and its legal penalties. This would also be necessary in tackling the issues associated with employment acceleration and risk expertise, as employers do have a considerable role to play in influencing employee behaviour on the roads.



Police forces and educational course providers should continue to work with academics to ensure that the education being offered to road users for a range of offences is as successful as it can be in improving road safety. Evaluations of various forms of education can allow for those most beneficial aspects to be understood and combined to create an ultimate educational course that has the greatest benefit to road safety for a range of social groups and individuals, potentially segmented according to key audience traits and characteristics which can be matched with the most successful strategies for that group. Whilst the first implication for policy presented above suggested that education should be used for the offence of using a mobile phone while driving, this is only the case where that education is effective enough as a road safety strategy. Education must be developed that is theoretically sound and can be evaluated for its success. No single individual or organisation can tackle risky road user behaviour alone. It is essential that a range of organisations and individuals work together to provide the most benefit to road safety, both for the offence of using a mobile phone while driving and more widely.

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## Appendices

### Appendix A – Ethical approval letters



#### RESEARCH AND ENTERPRISE SERVICES

Ref: ERP1200

1<sup>st</sup> July 2014

Leanne Savigar  
CBA2.033  
Chancellors Building

Dear Leanne,

**Re: Experiences of identifying road traffic offenders and offering them an educational alternative to prosecution**

Thank you for submitting your revised application for review. I am pleased to inform you that your application has been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

Document	Version	Date
Summary of Proposal	2	17.06.14
Information Sheet	2	17.06.14
Consent Form	1	13.05.14
Consent Form for the use of quotes	1	13.05.14
Interview Topic Guide	1	13.05.14

If the fieldwork goes beyond the date stated in your application, you must notify the Ethical Review Panel via the ERP administrator at [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP1 in the subject line of the e-mail.

If there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator stating ERP1 in the subject line of the e-mail. This form is available via <http://www.keele.ac.uk/researchsupport/researchethics/>. If you have any queries, please do not hesitate to contact me via the ERP administrator on [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) Stating ERP1 in the subject line of the e-mail.

Yours sincerely

A handwritten signature in cursive script that reads "Heidi".

PP

**Dr Jackie Waterfield**  
**Chair – Ethical Review Panel**

CC RI Manager  
Supervisor

Research and Enterprise Services, Keele University, Staffordshire, ST5 5BG, UK  
Telephone: + 44 (0)1782 734466 Fax: + 44 (0)1782 733740

Ref: ERP1199

1<sup>st</sup> July 2014

Leanne Savigar  
CBA2.033  
Chancellors Building

Dear Leanne,

**Re: Experiences of involvement in the delivery of an educational alternative to prosecution**

Thank you for submitting your revised application for review. I am pleased to inform you that your application has been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

Document	Version	Date
Summary of Proposal	2	17.06.14
Information Sheet	2	17.06.14
Consent Form	1	13.05.14
Consent Form for the use of quotes	1	13.05.14
Interview Topic Guide	1	13.05.14

If the fieldwork goes beyond the date stated in your application, you must notify the Ethical Review Panel via the ERP administrator at [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP1 in the subject line of the e-mail.

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Yours sincerely



pp

**Dr Jackie Waterfield**  
**Chair – Ethical Review Panel**

CC RI Manager  
Supervisor

Research and Enterprise Services, Keele University, Staffordshire, ST5 5BG, UK  
Telephone: + 44 (0)1782 734466 Fax: + 44 (0)1782 733740

Ref: ERP1198

28<sup>th</sup> July 2014

Leanne Savigar  
CBA2.033  
Chancellors Building

Dear Leanne,

**Re: Crash Course and Driver Behaviour**

Thank you for submitting your revised application for review. I am pleased to inform you that your application has been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

Document	Version	Date
Summary of Proposal	2	10.07.14
Information Sheet	2	10.07.14
Questionnaire	2	10.07.14

If the fieldwork goes beyond the date stated in your application, you must notify the Ethical Review Panel via the ERP administrator at [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP1 in the subject line of the e-mail.

If there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator stating ERP1 in the subject line of the e-mail. This form is available via <http://www.keele.ac.uk/researchsupport/researchethics/>

If you have any queries, please do not hesitate to contact me via the ERP administrator on [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) Stating ERP1 in the subject line of the e-mail.

Yours sincerely



pp

**Dr Jackie Waterfield**  
**Chair – Ethical Review Panel**

CC RI Manager  
Supervisor

Research and Enterprise Services, Keele University, Staffordshire, ST5 5BG, UK

Telephone: + 44 (0)1782 734466 Fax: + 44 (0)1782 733740

16<sup>th</sup> December 2014

Leanne Savigar  
CBA2.033  
Chancellors Building

Dear Leanne,

**Re: Education in road safety contexts**  
**Re: Education in road safety contexts - Observation**

Thank you for submitting your applications for review. I am pleased to inform you that your applications have been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

**Questionnaires**

Document	Version	Date
Summary of Proposal	2	12/12/14
Information Sheets	2	12/12/14
Questionnaires	1	27/10/14

**Observations**

Document	Version	Date
Summary of Proposal	2	12/12/14
Information Sheets	2	12/12/14
Consent Forms	1	27/10/14

If the fieldwork goes beyond the date stated in your application, you must notify the Ethical Review Panel via the ERP administrator at [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP1 in the subject line of the e-mail.

If there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator stating ERP1 in the subject line of the e-mail. This form is available via <http://www.keele.ac.uk/researchsupport/researchethics/>

If you have any queries, please do not hesitate to contact me via the ERP administrator on [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP1 in the subject line of the e-mail.

Yours sincerely



pp

**Dr Jackie Waterfield**  
**Chair – Ethical Review Panel**

CC RI Manager  
Supervisor



Ref: ERP2250

20<sup>th</sup> May 2015

Leanne Savigar  
Social Sciences  
CBA2.033  
Keele University

Dear Leanne

**Re: Education in road safety contexts**

Thank you for submitting your revised application for review. I am pleased to inform you that your application has been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

Document	Version	Date
Summary document	2	11.05.15
Letter of Invitation(s)	2	11.05.15
Information Sheet(s)	2	11.05.15
Consent Form(s)	1	27.02.15
Consent Form(s) for use of quotes	1	27.02.15
Interview Topic Guide(s)	1	27.02.15

If the fieldwork goes beyond the date stated in your application (1 February 2016), you must notify the Ethical Review Panel via the ERP administrator at [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP2 in the subject line of the e-mail.

If there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator stating ERP2 in the subject line of the e-mail. This form is available via <http://www.keele.ac.uk/researchsupport/researchethics/>.

If you have any queries, please do not hesitate to contact me via the ERP administrator on [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP2 in the subject line of the e-mail.

Yours sincerely

**Dr Colin Rigby**  
**Vice Chair – Ethical Review Panel**

CC RI Manager  
Supervisor



Ref: ERP344

1<sup>st</sup> July 2015

Leanne Savigar  
Social Sciences  
Keele University  
Keele

Dear Leanne

**Re: An exploration of the methods used to tackle mobile phone use while driving**

Thank you for submitting your revised application for review.

I am pleased to inform you that your application has been approved by the Ethics Review Panel. The following documents have been reviewed and approved by the panel as follows:

Document(s)	Version Number	Date
Summary Document	2	02/06/2015
Invitation Letter	1	21/05/2015
Information Sheet	2	25/06/2015
Consent Form	1	21/05/2015
Consent Form (for the use of quotes)	1	21/05/2015
Interview Guide	1	25/06/2015
Interview Debrief	2	25/06/2015

If the fieldwork goes beyond the date stated in your application (29<sup>th</sup> February 2016), you must notify the Ethical Review Panel via the ERP administrator at [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP3 in the subject line of the e-mail.

If there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator stating ERP3 in the subject line of the e-mail. This form is available via <http://www.keele.ac.uk/researchsupport/researchethics/>.

If you have any queries, please do not hesitate to contact me via the ERP administrator on [uso.erps@keele.ac.uk](mailto:uso.erps@keele.ac.uk) stating ERP3 in the subject line of the e-mail.

Yours sincerely

**Dr Helena Priest**  
**Chair – Ethical Review Panel**

CC RI Manager  
Supervisor



Appendix B – Question bank

Socio-demographic characteristics

On average, how many miles do you drive in a typical year?

..... miles a year

On average, how often do you drive on the following road types?

*Please tick one box for EACH type of road*

	Never	Less than once a month	About once a month	About once a fortnight	1-3 days a week	4-6 days a week	Every day
On urban roads							
On country roads							
On fast dual-carriageways or motorways							

On average, how often do you drive for the following purposes:

*Please tick one box for EACH journey purpose*

	Never	Less than once a month	About once a month	About once a fortnight	1-3 days a week	4-6 days a week	Every day
To get to and from work, college or university							
In the course of your work (e.g. to get to/from meetings)							
As a professional driver (i.e. you drive for a living)							
For personal reasons (e.g. social, shopping, leisure, other)							

Stephenson et al. 2010. Monitoring speed awareness courses: Baseline data collection.

How many times have you been caught speeding? .....

How many times have you been caught drink-driving? .....

Senserrick & Swinburne, 2001. Evaluation of an insight driver-training program for young drivers.

We would be very grateful if you could let us know whether you have committed any traffic offence in the last six months.

Have you been involved in any motoring offences in the last six months? Yes

No

If yes, for each of the offences below please indicate approximately how many times these happened in the last six months. *Please write the number of times in the space provided.*

Drink/drug related		Reckless driving	
Driving without due care		Taking vehicle without consent	
Racing on the highway		Tailgating (close following)	
Driving while disqualified		Failure to report an accident	
Vehicle tax offences		Seat belt offences	
Dangerous overtaking		Speeding	
Jumping red lights		Parking offences	
Failure to stop after an accident			

Conner & Lai. 2005. Evaluation of the effectiveness of the National Driver Improvement Scheme.

#### Attending decisions

To what extent do you agree that your decision to attend Crash Course was influenced by the following:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Wanting to avoid penalty points on your licence					
Wanting to avoid getting caught again					
Getting information that will help them drive within the speed limit					
Wanting to become a better driver					

ACPO. 2011. Evaluation of the National Speed Awareness Course  
Attitudes

Please tick THREE things in the list below that you think are MOST important causes of deaths or serious injuries in bad crashes.

Possible reasons for deaths and injuries in road crashes	Please tick 3 reasons you think most important
Ice on the road	

Using mobile while driving	
Pedestrians not looking	
Driver on drugs	
People driving too fast	
Going through red lights	
People in the car distracting the driver	
Wet and rainy conditions	
People driving too slow	
Not wearing a seatbelt	
Road works	
Driver has been drinking	
Elderly shaky drivers	
People driving who have no licence	
Burst tyres	
Sharp bends in the road	
Someone driving when they are tired	
Another reason (please state)	

Feelings

Circle the number on each scale that best describes what you feel about the things listed below.

Driving at 28 miles an hour in a 30 mile an hour area

Stupid	1	2	3	4	5	6	7	Perfectly ok
--------	---	---	---	---	---	---	---	--------------

Always wearing a seatbelt

Stupid	1	2	3	4	5	6	7	Perfectly ok
--------	---	---	---	---	---	---	---	--------------

Reading a text quickly while driving

Stupid	1	2	3	4	5	6	7	Perfectly ok
--------	---	---	---	---	---	---	---	--------------

Driving at 45 miles an hour in a 30 mile an hour area

Stupid	1	2	3	4	5	6	7	Perfectly ok
--------	---	---	---	---	---	---	---	--------------

Having a race in cars with friends for a laugh

Stupid	1	2	3	4	5	6	7	Perfectly ok
--------	---	---	---	---	---	---	---	--------------

If you did feel anxious or scared, do you think you *could* ask the driver to slow down (stop using a phone/put on their seatbelt)?

Hoggarth et al. 2009. Staffordshire Fire and Rescue Service Evaluation of the Crash Course
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Attitudes-risk

For each of the following, would you agree or disagree that they **increase the risk** of drivers being involved in a crash?

(Circle one number for each statement)

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree			
Driving over the speed limit		1	2	3	4	5	6	7				
Driving a car which is in bad condition						1	2	3	4	5	6	7
Driving at night time		1	2	3	4	5	6	7				
Being an over confident driver				1	2	3	4	5	6	7		
Eating while driving		1	2	3	4	5	6	7				
Being over the legal alcohol limit				1	2	3	4	5	6	7		
Listening to loud music while driving						1	2	3	4	5	6	7
Being tired		1	2	3	4	5	6	7				
Driving at an inappropriate speed for the conditions (fog, heavy rain)		1	2	3	4	5	6	7	(i.e. in			
Talking on a mobile phone			1	2	3	4	5	6	7			
Being under the influence of Cannabis						1	2	3	4	5	6	7
Operating a car stereo while driving				1	2	3	4	5	6	7		
Driving in bad weather conditions				1	2	3	4	5	6	7		
Talking to other passengers while driving				1	2	3	4	5	6	7		
Being an inexperienced driver				1	2	3	4	5	6	7		

Ashworth et al. 2007. An evaluation of the Safe Drive Stay Alive road safety presentation for pre-drivers

Attitudes - Risks/Road Safety Laws

How much do you agree or disagree with the following statements?

(Please tick one option per statement)

- My friends take risks when they are driving
- It is not worth taking risks on the road
- My friends would laugh at me if I drove really carefully
- I would feel nervous if I took risks when driving
- If I travel above the speed limit I'm more likely to crash
- I enjoy taking risks on the road
- People who drink drive are very unlikely to get caught
- I can take a few risks and still stay safe on the road
- People who drive after taking drugs are very unlikely to get caught
- It's easy to be over the drink drive limit the morning after drinking alcohol
- Driving really fast impresses passengers
- A safe speed is often below the speed limit
- It's wrong for drivers to take risks
- Driving is more fun when you take a few risks
- If I don't wear a seatbelt then I'm putting myself at risk
- If I don't wear a seatbelt I'm putting other people in the car at risk
- Driving is more fun when you drive really fast
- Not wearing a seatbelt is safe if the driver is skilled
- Driving above the speed limit is safe if the driver is skilled
- Driving after drinking alcohol is safe if the driver is skilled
- Driving after taking drugs is safe if the driver is skilled
- In the future I will never drive after I have taken drugs
- In the future I will never drive after I have drunk alcohol

In the future I will never drive above the speed limit  
In the future I will always wear a seatbelt  
In the future I will always drive safely

Brainbox research/Wasted Lives. 2009. What effect does Wasted Lives have on young people's road user attitudes and behaviour?
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Attitudes – Laws of the road

For EACH LINE in the table below, please indicate TO WHAT EXTENT YOU AGREE OR DISAGREE with that specific statement. Please indicate this by circling a number in the grid next to each line.

To what extent do you agree with EACH of the following statements?

Some people can drive perfectly safely after drinking 3 or 4 pints of beer.

People stopped by the police for close-following are unlucky because lots of people do it.

I would welcome further use of the double white lines to let me know when it is unsafe to overtake.

Speed limits are often set too low, with the result that many drivers ignore them.

I think the police should start breathalysing a lot more drivers around pub closing times.

It is quite acceptable to take a slight risk when overtaking.

Close following isn't really a serious problem at the moment.

I know exactly how fast I can drive and still drive safely.

Some drivers can be perfectly safe overtaking in situations which would be risky for others.

Even one drink can make you drive less safely.

I would favour stricter enforcement of the speed limit of 30mph roads.

Some people can drive safely even though they only leave a small gap behind the vehicle in front.

The aim of the police should be to stop as many people as possible overtaking in risky circumstances.

Even driving slightly faster than the speed limit makes you less safe as a driver.

It's hard to have a good time if everyone else is drinking but you have to limit yourself because you're driving.

I would be happier if close-following regulations were more closely applied.

Stricter enforcement of speed limits on 30mph roads would be effective in reducing the occurrence of road accidents.

Even driving slightly too close to the car in front makes you less safe as a driver.

I think it is okay to overtake in risky circumstances as long as you drive within your own capabilities.

The law should be changed so that drivers aren't allowed to drink alcohol anymore.

Conner & Lai. 2005. Evaluation of the effectiveness of the National Driver Improvement Scheme.
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Attitudes - Seatbelts

Below are some statements about various aspects of seatbelts and their use. Please indicate how much you agree with each statement by placing a tick in the appropriate box on the scale.

It is inconvenient to wear a seatbelt

I would always wear a seatbelt when driving on country roads

I often need to be reminded to put my seatbelt on when I am a passenger in a car

Wearing a seatbelt messes up my clothes

When I wear a seatbelt it cuts into my neck

When I get into my car to drive, I put on my seatbelt without thinking – it is almost ‘automatic’

I would never wear a seatbelt when driving on residential roads

Wearing a seatbelt makes me feel trapped/constrained

I don’t see the need to wear a seatbelt if it is only a short trip (e.g. to the local shops)

I sometimes find that I have to remind myself to put my seatbelt on before driving

I would always wear a seatbelt when driving on the motorway

I find it difficult to reach things in the car when I wear a seatbelt

Wearing a seatbelt is physically uncomfortable

When I am a passenger in a car I always put my seatbelt on without thinking about it

Seatbelts are not made for people my size/height

Brainbox research/Wasted Lives. 2009. What effect does Wasted Lives have on young people’s road user attitudes and behaviour?

### Attitudes - Mobile Phones

Below are some statements about mobiles phones and driving. Please indicate how much you agree with each statement by placing a tick in the appropriate box on the scale.

People stopped by the police for speaking on a mobile phone whilst driving are unlucky because lots of people do it

Even texting on a mobile phone for a short time makes you less safe as a driver

I think that people don’t really take any notice of the risks of texting on a mobile phone when driving

Speaking on a mobile phone whilst driving isn’t really a serious problem at the moment

Harsher penalties should be introduced for drivers who text on their mobile phone while driving

Some people can drive safely even when they are speaking on a mobile phone at the same time

On the whole people aren’t aware of the dangers involved in texting on a mobile phone when driving

I would be happier if regulations on speaking on a mobile phone whilst driving were more strictly applied

I would favour a clamp down on drivers who text on their mobile phone whilst driving

It is quite acceptable to text on a mobile phone whilst driving

Even speaking on a mobile phone for a short time makes you less safe as a driver

On the whole people aren’t aware of the dangers involved in speaking on a mobile phone when driving



I have confidence in the police.

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree

I think the police perform their job professionally

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree

Police do their job well.

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree

I have great respect for the police.

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree

Murphy, Hinds & Fleming. 2008. Encouraging public cooperation and support for the police.
---

Procedural justice

Police are concerned about respecting a citizen's individual rights.

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree

Police treat people as if they can be trusted to do the right thing.

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree

Police treat people fairly and equally.

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree

Police are generally honest in the way they deal with people.

Strongly agree    Agree    Neither agree nor disagree    Disagree  
Strongly disagree



Police treat people as if they only do the right thing when forced to.  
 Strongly agree    Agree    Neither agree nor disagree    Disagree  
 Strongly disagree

Hinds. 2008. Public satisfaction with police: the influence of general attitudes and police-citizen attitudes.  
 &  
 Murphy, Hinds & Fleming. 2008. Encouraging public cooperation and support for the police.

Positives/Negatives of breaking the law

Which of these do you think are POSITIVE things You might get out of driving faster than the speed limit? (Using a phone while driving/not wearing a seatbelt while driving)

(Followed by list of potential positives) – Answers regarding seatbelt use taken from research conducted by Simsekoglu & Lajunen (2008).

Which of these do you think are NEGATIVE things You might get out of driving faster than the speed limit? (Using a phone while driving/not wearing a seatbelt while driving)

(Followed by list of potential negatives)

ACPO. 2011. Evaluation of the National Speed Awareness Course

Behaviour

Have you ever driven at speeds of 40mph or more in a 30mph limit area?

Never      Once      2-5 times      6-10 times      Every week

Have you ever raced with another driver on public roads?

Never      Once      2-5 times      6-10 times      Every week

Have you ever driven when you think you had drunk more than the legal limit?

Never      Once      2-5 times      6-10 times      Every week

Have you ever driven after taking illegal drugs?

Never      Once      2-5 times      6-10 times      Every week

Have you ever driven a car when you didn't have a licence?

Never      Once      2-5 times      6-10 times      Every week

Have you ever driven a stolen vehicle?

Never      Once      2-5 times      6-10 times      Every week

Do you belt up when you are a front seat passenger?

Never      Not often      Half the time      Nearly all the time      Always

Do you belt up in the back?

Never            Not often            Half the time            Nearly all the time            Always

Williams, Stradling, Kinnear, & Mann. 2005. Evaluation of Brake Young Driver Education Scheme
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Behaviour – errors, risk and violations

Indicate how often, if at all, the following things have happened to you over the last year by circling ONE of the numbers to the right of each item. These numbers range from 0-5 and have the following meanings: 0=never, 1=hardly ever, 2=occasionally, 3=quite often, 4=frequently, 5=nearly all the time.

Become impatient with a slow driver in the outer lane and overtake on the inside.

Drive especially close or ‘flash’ the car in front as a signal for that driver to go faster or get out of your way.

Stuck behind a slow-moving vehicle on a two-lane highway, you are driven by frustration to try to overtake in risky circumstances.

Take a chance and cross on lights that have turned red.

Angered by another driver’s behaviour, you give chase with the intention of giving him/her a piece of your mind.

Deliberately disregard the speed limits late at night or very early in the morning.

Drive back from a party, restaurant, or pub, even though you realise that you may be over the legal blood-alcohol limit.

Have an aversion to a particular class of road user, and indicate your hostility by whatever means you can.

Park on a double yellow line and risk a fine.

Overtake a slow-moving vehicle on the inside lane or hard shoulder of the motorway.

Cut the corner on a right-hand turn and have to swerve violently to avoid an oncoming vehicle.

Ignore ‘give way’ signs, and narrowly avoid colliding with traffic having right of way.

Deliberately drive the wrong way down a deserted one-way street.

Disregard red lights when driving late at night along empty roads.

Get involved in unofficial ‘races’ with other drivers.

(Doesn’t have any in relation to phone use or seatbelt wearing)

Reason et al. 1990. Errors and violations on the roads: a real distinction?
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Subjective norm – attitudes towards peer pressure

My parents/people who are important to me think I should/shouldn’t exceed speed limits (wear a seatbelt, use a phone)

1: Should; 7: Should not

My close friends approve/disapprove of me keeping to the speed limit (wearing a seatbelt, using a phone)

1: Approves; 7: Disapproves

My partner/boyfriend/girlfriend approves/disapproves of me driving too fast (not wearing a seatbelt, using a phone)

1: Approves; 7: Disapproves

Ashworth et al. 2007. An evaluation of the Safe Drive Stay Alive road safety presentation for pre-drivers

Importance of others

How often do you think the people who are important to you will drive faster than the speed limit over the next 6 months?

Never

All the time

Please think only about those people important to you who would approve of you driving faster than the speed limit (using a phone, not wearing a seatbelt).

Overall, how much would they approve?

Very much

Not at all

Please think only about those people important to you who would disapprove of you driving faster than the speed limit (using a phone, not wearing a seatbelt).

Overall, how much would they disapprove?

Very much

Not at all

Stephenson et al. 2010. Monitoring speed awareness courses: Baseline data collection.

Perceived behavioural control

With regard to your driving how much do you want to do what your friends think you should?

1: Not at all; 7: Very much

Holding a long queue of traffic up, do you think you can still stick to the speed limit?

1: Definitely no; 7: Definitely yes

Are you confident you can resist your friends' persuasion to drive faster?

1: Definitely no; 7: Definitely yes

Ashworth et al. 2007. An evaluation of the Safe Drive Stay Alive road safety presentation for pre-drivers

Feelings/likelihood of danger

Compared with the average driver of your age and sex, how likely are you to have a car crash in the next 6 months due to driving faster than the speed limit?

Much less likely than  
than the average driver  
1      2      3      4      5      6      7      8      9  
Much more likely  
the average driver

Compared with the average driver of your age and sex, how likely are you to be caught for driving faster than the speed limit in the next 6 months?

Much less likely than  
than the average driver  
1      2      3      4      5      6      7      8      9  
Much more likely  
the average driver

in the next 6 months, how good or bad would it be for you personally if you drove faster than the speed limit (used a phone/didn't wear a seatbelt)?

Extremely good  
1      2      3      4      5      6      7      8      9  
Extremely bad

How much would you enjoy it if you drove faster than the speed limit (used a phone/didn't wear a seatbelt) over the next 6 months?

Would enjoy it very much  
enjoy it at all  
1      2      3      4      5      6      7      8      9  
Would not

Stephenson et al. 2010. Monitoring speed awareness courses: Baseline data collection.

Future Intentions

Is there anything you now want to change about how you behave in cars? Or things you would do differently in the future? Please write below.

(Would need to be split into 2 separate questions?)

Hoggarth et al. (2009) Staffordshire Fire and Rescue Service Evaluation of the Crash Course

After I pass my driving test (attending CC) I intend to keep to all the advice given in the Highway Code (CC)

1: Definitely do not; 7: Definitely do

I would like to ensure that I always drive within the law

1: Definitely no; 7: Definitely yes

I want to drive within the speed limits at all times (wearing seatbelt, refraining from using mobile phone)

1: Strongly disagree; 7: Strongly agree

I expect that it is inevitable that I will drive over the speed limit sometimes (do not wear seatbelt/use phone)

1: Untrue; 7: True

<p>Ashworth et al. (2007) An evaluation of the Safe Drive Stay Alive road safety presentation for pre-drivers &amp; Poulter &amp; McKenna. 2010. Evaluating the effectiveness of a road safety education intervention for pre-drivers: An application of the TPB.</p>
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To what extent do you intend to drive faster than the speed limit (use a phone/not wear a seatbelt) over the next 6 months?

No extent at all

A great extent

1            2            3            4            5            6            7            8            9

In the next 6 months, how difficult or easy will it be for you to avoid driving faster than the speed limit (using a phone/not wearing a seatbelt)?

Extremely difficult

Extremely easy

1            2            3            4            5            6            7            8            9

How often do you think you will drive faster than the speed limit (use a phone/not wear a seatbelt) in the next 6 months?

All the time

Never

1            2            3            4            5            6            7            8            9

ACPO. 2011. Evaluation of the National Speed Awareness Course
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Evaluation

What did you think of the Crash Course? Tick all the boxes that apply to you.

It really made me think	<input type="checkbox"/>	Too scary	<input type="checkbox"/>
I didn't really believe them	<input type="checkbox"/>	Brilliant	<input type="checkbox"/>
Helpful information	<input type="checkbox"/>	I knew the stuff already	<input type="checkbox"/>
Waste of time	<input type="checkbox"/>	I will talk about it with my friends	<input type="checkbox"/>

It upset me too much		I know now what I can do to be safer	
True, real life examples were good		Too long, got boring	

Is there anything you would change about Crash Course? Please write it here.

.....  
 .....  
 .....  
 .....

Hoggarth et al. 2009. Staffordshire Fire and Rescue Service Evaluation of the Crash Course
--

Overall how would you say that Wasted Lives has affected how you behave on the road?

- I'll take a lot less risks
- I'll take a few less risks
- It's not made any difference
- I'll take more risks

Please tell us why

.....  
 .....  
 .....  
 .....

Brainbox research/Wasted Lives. 2009. What effect does Wasted Lives have on young people's road user attitudes and behaviour?
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Which parts of the course have you found most useful?

.....  
 .....  
 .....  
 .....

ACPO. 2011. Evaluation of the National Speed Awareness Course
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What do you remember most about the course?

Is there anything you believe should be added to the course?

What was the most important part of the course for you personally?

Has the course changed the way you drive? Yes No

If yes, how has the way you drive changed?

If no, what are possible reasons why the course did not change the way you drive?

Senserrick & Swinburne. 2001. Evaluation of an insight driver-training program for young drivers.
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Appendix C – Annotated questionnaire

Annotated questionnaire

Annotated comments provided in red font colour.



## Pre-Course Questionnaire

### Driver Attitudes and Behaviour

This is the first of three questionnaires that you are being invited to complete by Leanne Savigar, a Keele University research student. You will be asked about your attitudes and behaviour as a driver and the questionnaire should take no longer than 20 minutes to complete. Your participation is voluntary but is greatly appreciated. Completion of this questionnaire in no way influences your involvement with Crash Course and you may stop at any time should you wish to do so.

If you are happy with the information sheet that you have read and wish to take part then please continue to complete this questionnaire. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

Please answer all questions as honestly as possible.

Please create your own unique participant number so that I can match your responses across the different questionnaires by providing:

The day of your birthday, **for example,**  
**if you were born on 23/04/1982 then you would enter 2 3**

--	--

The first three letters of the name of the place you were born, and,

--	--	--

The first and last letters of your mother's maiden name

--	--

Thank you in advance for taking part.

**These three questions provide a unique participant code created from data that participants are able to remember, rather than asking them to remember a code that has no relevance to them.**



### Attitudes – General Crash Risk

To what extent do you agree or disagree that each of the following behaviours **increases the risk** of a driver being involved in a crash?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Driving over the speed limit					
2	Reading a text message while driving					
3	Driving a car which has not been well-maintained					
4	Eating food, such as a chocolate bar, while driving					
5	Driving a car while over the legal alcohol limit					
6	Talking on a <b>hand-held</b> mobile phone while driving					
7	Talking on a <b>hands-free</b> mobile phone while driving					
8	Changing a CD or radio station while driving					

Questions on attitudes are needed to see whether attitude change occurs as a result of Crash Course attendance. Enquiring into attitudes regarding both legal and illegal behaviours allowed for an examination of whether Crash Course changed only attitudes and behaviours of only those offences for which it may be offered as an alternative to prosecution or all behaviours discussed within the course.

Hands-free and hand-held behaviour have been separated to acknowledge whether changes in attitudes are related to greater knowledge of the law or greater knowledge of the dangers of using any type of phone while driving.

Questions 1-8 were taken from work conducted by Ashworth et al. (2007).

Attitudes – Driver Safety

To what extent do you agree or disagree with the following statements regarding  
**your** driver behaviour?  
 (Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	I would feel safe driving over the speed limit					
10	I would feel safe reading a text message while driving					
11	I would feel safe driving a car which has not been well-maintained					
12	I would feel safe eating food, such as a chocolate bar, while driving					
13	I would feel safe driving over the legal alcohol limit					
14	I would feel safe talking on a <b>hand-held</b> mobile phone while driving					
15	I would feel safe talking on a <b>hands-free</b> mobile phone while driving					
16	I would feel safe changing a CD or radio station while driving					
17	I would feel safe driving without wearing a seatbelt					

These questions were provided as a greater focus on personal attitudes towards own safety than those enquiring into general crash risk, allowing for an understanding of whether drivers consider their own behaviour as more skilful and safe than that of other drivers.

Questions 9-16 were adapted from Hoggarth et al. (2000) and Reason et al. (1990). The answer format had been changed to follow the previous questions, resulting in some change in the wording of the questions also.

Attitudes – Police

Thinking only about the way that the police enforce **traffic law**, to what extent do you agree or disagree with the following statements?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18	The police enforce traffic law fairly					
19	The police make their decisions based on facts, not personal biases or opinions					
20	The police treat people with dignity and respect					
21	I have confidence that the police do their job well					
22	The police apply the rules consistently to different people					

To what extent do you agree or disagree with the following statements regarding the police **in general**?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23	In general, the police enforce the law fairly					
24	In general, the police make their decisions based on facts, not personal biases or opinions					
25	In general, the police treat people with dignity and respect					
26	I have confidence that the police do their job well					
27	In general, the police apply the rules consistently to different people					

Please answer the following questions thinking only about **your** experience of being stopped by the police that led to your attendance at Crash Course.

To what extent do you agree or disagree with the following statements regarding **your** experience?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
28	The police enforced the law fairly					
29	The police made their decisions based on facts, not personal biases or opinions					
30	The police treated me with dignity and respect					

31	The outcome I received was fair					
32	I feel angry with the police					
33	I feel annoyed with myself for committing the offence					
34	I feel annoyed with myself for getting caught					
35	I feel ashamed of my behaviour					
36	I feel embarrassed					

Questions 18-31 were related to the concept of procedural justice, enquiring into perceptions of the police in three different manners and regarding the fairness and legitimacy of those police processes. They were included to assess driver beliefs regarding the fairness of police treatment and whether any changes were observed in attitudes towards the police following attendance at Crash Course.

These questions have been taken from Tyler, Sherman, Strang, Barnes & Woods (2007) and Sunshine & Tyler (2003).

## Your Behaviour

How often have **you** performed the following driver behaviours over the **last 6 months?** (Please tick the appropriate box)

		Never	Hardly ever	Occasionally	Quite often	Nearly all the time
37	Driven over the speed limit					
38	Read a text message while driving					
39	Driven a car that has not been well-maintained					
40	Eaten food, such as a chocolate bar, while driving					
41	Driven whilst you suspect you are over the legal alcohol limit					
42	Spoken to somebody on a <b>hand-held</b> mobile phone while driving					
43	Spoken to somebody on a <b>hands-free</b> mobile phone while driving					
44	Changed a CD or radio station while driving					
45	Driven without wearing a seatbelt					

Questions on driver behaviour were needed to observe any behaviour change in drivers in the six months prior to Crash Course and the 6 months after course attendance. A six month time period was chosen as it would be easier for course attendees to reflect back on than a whole year and more representative than asking about only the last month. The six-month longitudinal nature of the research also meant that this reflected all behaviour that had taken place since attending Crash Course.

Questions 37-45 were taken from Williams et al. (2005), Hoggarth et al. (2009) and Reason et al. (1990). The answer format of the questions was changed to reflect a similar format used throughout the questionnaire and as drivers may not remember a specific numbers of times that they have performed the behaviours.

Seatbelt and Mobile Phone Use

To what extent do you agree or disagree with the following statements regarding the use of seatbelts and mobile phones? (Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
46	It is quite acceptable to use a <b>hand-held</b> mobile phone while driving					
47	It is quite acceptable to use a <b>hands-free</b> mobile phone while driving					
48	It is quite acceptable <b>not</b> to wear a seatbelt while driving					
49	Using a <b>hand-held</b> phone while driving isn't really a serious problem					
50	Using a <b>hands-free</b> phone while driving isn't really a serious problem					
51	Not wearing a seatbelt while driving isn't really a serious problem					

Attitudes towards mobile phone use and seatbelts specifically were assessed as they play a primary role in Crash Course.

Questions 46-51 were taken from Conner & Lai (2005) and Fylan (2009).

Please read the following question and answer by ticking the appropriate box

		Highly Unlikely	Unlikely	Possibly	Likely	Highly Likely
52	If your <b>hand-held</b> phone starts ringing while you are driving, how likely do you think you are to answer the phone call?					

Which of the following do you think are acceptable reasons for using a **hand-held** phone while driving? (Please tick all that apply)

53	Making important business/work-related calls	
	Letting people know you are ok	
	Making social calls	
	Checking emails/social media	
	Checking traffic announcements/alerts	
	Reading a map	
	Making calls to emergency services	
	Answering what could be an emergency phone call	
	None of the above	

Future intentions

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour? (Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
54	In the future, I will always obey speed limits					
55	In the future, I will avoid using a <b>hand-held</b> phone while driving at all times					
56	In the future, I will avoid using a <b>hands-free</b> phone while driving at all times					
57	In the future, I will wear my seatbelt at all times while driving					

Asking about future intentions allows for an understanding of whether course attendees intend to change their behaviour as much after 6 months as they do straight after Crash Course, and whether those intentions translate well into behaviour.

Questions 54-57 were taken from Ashworth et al. (2007) and Poulter & McKenna (2010).

Your details

58. What is your age? (Please state) .....

What is your gender (Please tick one box)

59	Male	
	Female	

What is your ethnic group? (Please tick one box)

60	White	English/Welsh/Scottish/ Northern Irish/British	
		Irish	
		Gypsy or Irish Traveller	
		Other White background	
	Mixed/Multiple ethnic groups	White and Black Caribbean	
		White and Black African	
		White and Asian	
		Other Mixed background	
	Asian/Asian British	Indian	
		Pakistani	
		Bangladeshi	
		Chinese	
		Other Asian background	
	Black/African/ Caribbean/Black British	African	
		Caribbean	

		Other Black/African/Caribbean background	
	Other ethnic group	Arab	
		Any other ethnic group	

What is your current highest level of education? (Please tick one box)

61	Postgraduate qualification	
	Degree level qualification (or equivalent)	
	A level	
	ONC/ National level BTec	
	O level or GCSE	
	Other	
	No formal qualifications	

How many years driving experience do you have? (Please tick one box)

62	0-2	
	3-10	
	11+	

63. On average, how many miles do you drive in a typical year? (Please state)  
..... miles a year

On what road types do you spend most of your time driving? (Please tick one box)

64	Urban roads	
	Country roads	
	Motorways	

For what purposes do you spend most of your time driving? (Please tick one box)

65	Driving for work purposes	
	Commuting to a place of work	
	Social/Pleasure	
	Social/Pleasure and Work	

What other previous motoring convictions have you had? (Please tick all that apply)

66	Speeding	
	Driving through a red light	
	Drink driving	
	Using a mobile phone	
	Not wearing a seatbelt	



	Other (Please specify .....	
	None	

What is the reason for your involvement with Crash Course? (Please tick one box)

67	Caught using a mobile phone while driving	
	Caught not wearing a seatbelt while driving	
	Other	

68. What is the date of the Crash Course that you are attending? (Please state)

.....

To what extent was your decision to attend Crash Course influenced by the following:

69		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	Wanting to avoid penalty points on your licence					
	Wanting to avoid getting caught again					
	Wanting to improve knowledge about safe driving					
	Wanting to become a better driver					

Please ensure that you are happy with all answers you have provided. By submitting this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

I will be conducting further research looking at Crash Course and driver behaviour. Involvement in these additional aspects of the research will allow you to be entered into a prize draw with the chance of winning a £50 gift card of your choice, simply for taking part.

If you are happy to be contacted and entered into this prize draw then please leave your e-mail address or other means of contact below:

.....

Please feel free to contact me for further information or to voice your views using the e-mail address [l.savigar@keele.ac.uk](mailto:l.savigar@keele.ac.uk).



## Pre-Course Questionnaire

### Driver Attitudes and Behaviour

This is the first of three questionnaires that you are being invited to complete by Leanne Savigar, a Keele University research student. You will be asked about your attitudes and behaviour as a driver and the questionnaire should take no longer than 20 minutes to complete. Your participation is voluntary but is greatly appreciated. Completion of this questionnaire in no way influences your involvement with Crash Course and you may stop at any time should you wish to do so.

If you are happy with the information sheet that you have read and wish to take part then please continue to complete this questionnaire. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

Please answer all questions as honestly as possible.

Please create your own unique participant number so that I can match your responses across the different questionnaires by providing:

The day of your birthday, *for example,*  
if you were born on 23/04/1982 then you would enter 2 3

--	--

The first three letters of the name of the place you were born, and,

--	--	--

The first and last letters of your mother's maiden name

--	--

Thank you in advance for taking part.

Attitudes – General Crash Risk

To what extent do you agree or disagree that each of the following behaviours **increases the risk** of a driver being involved in a crash?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Driving over the speed limit					
2	Reading a text message while driving					
3	Driving a car which has not been well-maintained					
4	Eating food, such as a chocolate bar, while driving					
5	Driving a car while over the legal alcohol limit					
6	Talking on a <b>hand-held</b> mobile phone while driving					
7	Talking on a <b>hands-free</b> mobile phone while driving					
8	Changing a CD or radio station while driving					

Attitudes – Driver Safety

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	I would feel safe driving over the speed limit					
10	I would feel safe reading a text message while driving					
11	I would feel safe driving a car which has not been well-maintained					
12	I would feel safe eating food, such as a chocolate bar, while driving					
13	I would feel safe driving over the legal alcohol limit					
14	I would feel safe talking on a <b>hand-held</b> mobile phone while driving					
15	I would feel safe talking on a <b>hands-free</b> mobile phone while driving					

16	I would feel safe changing a CD or radio station while driving					
17	I would feel safe driving without wearing a seatbelt					

Attitudes – Police

Thinking only about the way that the police enforce **traffic law**, to what extent do you agree or disagree with the following statements?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18	The police enforce traffic law fairly					
19	The police make their decisions based on facts, not personal biases or opinions					
20	The police treat people with dignity and respect					
21	I have confidence that the police do their job well					
22	The police apply the rules consistently to different people					

To what extent do you agree or disagree with the following statements regarding the police **in general**?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23	In general, the police enforce the law fairly					
24	In general, the police make their decisions based on facts, not personal biases or opinions					
25	In general, the police treat people with dignity and respect					
26	I have confidence that the police do their job well					
27	In general, the police apply the rules consistently to different people					

Please answer the following questions thinking only about **your** experience of being stopped by the police that led to your attendance at Crash Course. To what extent do you agree or disagree with the following statements regarding **your** experience?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
28	The police enforced the law fairly					
29	The police made their decisions based on facts, not personal biases or opinions					
30	The police treated me with dignity and respect					
31	The outcome I received was fair					
32	I feel angry with the police					
33	I feel annoyed with myself for committing the offence					
34	I feel annoyed with myself for getting caught					
35	I feel ashamed of my behaviour					
36	I feel embarrassed					

### Your Behaviour

How often have **you** performed the following driver behaviours over the **last 6 months?**

(Please tick the appropriate box)

		Never	Hardly ever	Occasionally	Quite often	Nearly all the time
37	Driven over the speed limit					
38	Read a text message while driving					
39	Driven a car that has not been well-maintained					
40	Eaten food, such as a chocolate bar, while driving					
41	Driven whilst you suspect you are over the legal alcohol limit					
42	Spoken to somebody on a <b>hand-held</b> mobile phone while driving					
43	Spoken to somebody on a <b>hands-free</b> mobile phone while driving					
44	Changed a CD or radio station while driving					
45	Driven without wearing a seatbelt					

Seatbelt and Mobile Phone Use

To what extent do you agree or disagree with the following statements regarding the use of seatbelts and mobile phones?  
(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
46	It is quite acceptable to use a <b>hand-held</b> mobile phone while driving					
47	It is quite acceptable to use a <b>hands-free</b> mobile phone while driving					
48	It is quite acceptable <b>not</b> to wear a seatbelt while driving					
49	Using a <b>hand-held</b> phone while driving isn't really a serious problem					
50	Using a <b>hands-free</b> phone while driving isn't really a serious problem					
51	Not wearing a seatbelt while driving isn't really a serious problem					

Please read the following question and answer by ticking the appropriate box

		Highly Unlikely	Unlikely	Possibly	Likely	Highly Likely
52	If your <b>hand-held</b> phone starts ringing while you are driving, how likely do you think you are to answer the phone call?					

Which of the following do you think are acceptable reasons for using a **hand-held** phone while driving?

(Please tick all that apply)

53	Making important business/work-related calls	
	Letting people know you are ok	
	Making social calls	
	Checking emails/social media	
	Checking traffic announcements/alerts	
	Reading a map	
	Making calls to emergency services	
	Answering what could be an emergency phone call	
	None of the above	

Future intentions

To what extent do you agree or disagree with the following statements regarding  
**your** driver behaviour?  
 (Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
54	In the future, I will always obey speed limits					
55	In the future, I will avoid using a <b>hand-held</b> phone while driving at all times					
56	In the future, I will avoid using a <b>hands-free</b> phone while driving at all times					
57	In the future, I will wear my seatbelt at all times while driving					

Your details

58. What is your age? (Please state) .....

What is your gender (Please tick one box)

59	Male	
	Female	

What is your ethnic group? (Please tick one box)

60	White	English/Welsh/Scottish/ Northern Irish/British	
		Irish	
		Gypsy or Irish Traveller	
		Other White background	
	Mixed/Multiple ethnic groups	White and Black Caribbean	
		White and Black African	
		White and Asian	
		Other Mixed background	
	Asian/Asian British	Indian	
		Pakistani	
		Bangladeshi	
		Chinese	
		Other Asian background	
	Black/African/ Caribbean/Black British	African	
		Caribbean	
		Other Black/African/Caribbean background	
Other ethnic group	Arab		
	Any other ethnic group		

What is your current highest level of education? (Please tick one box)

61	Postgraduate qualification	
	Degree level qualification (or equivalent)	
	A level	
	ONC/ National level BTec	
	O level or GCSE	
	Other	
	No formal qualifications	

How many years driving experience do you have? (Please tick one box)

62	0-2	
	3-10	
	11+	

63. On average, how many miles do you drive in a typical year? (Please state)  
 ..... miles a year

On what road types do you spend most of your time driving? (Please tick one box)

64	Urban roads	
	Country roads	
	Motorways	

For what purposes do you spend most of your time driving? (Please tick one box)

65	Driving for work purposes	
	Commuting to a place of work	
	Social/Pleasure	
	Social/Pleasure and Work	

What other previous motoring convictions have you had? (Please tick all that apply)

66	Speeding	
	Driving through a red light	
	Drink driving	
	Using a mobile phone	
	Not wearing a seatbelt	
	Other (Please specify .....)	
	None	

What is the reason for your involvement with Crash Course? (Please tick one box)

67	Caught using a mobile phone while driving	
----	---	--



	Caught not wearing a seatbelt while driving	
	Other	

68. What is the date of the Crash Course that you are attending? (Please state)

.....

To what extent was your decision to attend Crash Course influenced by the following:

69		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	Wanting to avoid penalty points on your licence					
	Wanting to avoid getting caught again					
	Wanting to improve knowledge about safe driving					
	Wanting to become a better driver					

Please ensure that you are happy with all answers you have provided. By submitting this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

I will be conducting further research looking at Crash Course and driver behaviour. Involvement in these additional aspects of the research will allow you to be entered into a prize draw with the chance of winning a £50 gift card of your choice, simply for taking part.

If you are happy to be contacted and entered into this prize draw then please leave your e-mail address or other means of contact below:

.....

Please feel free to contact me for further information or to voice your views using the e-mail address [I.savigar@keele.ac.uk](mailto:I.savigar@keele.ac.uk).

Thank you for completing this questionnaire.



## Post-Course Questionnaire

### Crash Course and Driving Behaviour

This is the second of three questionnaires that you are being invited to complete by Leanne Savigar, a Keele University research student. You will be asked about your attitudes as a driver and your thoughts about the Crash Course that you have just attended. The questionnaire should take no longer than 20 minutes to complete. Your participation is voluntary but is greatly appreciated. Completion of this questionnaire in no way influences your involvement with Crash Course and you may stop at any time should you wish to do so.

If you are happy with the information that you have read and wish to take part in my research then please continue to complete this questionnaire. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

Please answer all questions as honestly as possible.

Please create your own unique participant number so that I can match your responses across the different questionnaires by providing:

The day of your birthday, **for example,**  
**if you were born on 23/04/1982 then you would enter 2 3**

--	--

The first three letters of the name of the place you were born, and,

--	--	--

The first and last letters of your mother's maiden name

--	--

Thank you in advance for taking part.

Attitudes – General Crash Risk

To what extent do you agree or disagree that each of the following behaviours **increases the risk** of a driver being involved in a crash?  
(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Driving over the speed limit					
2	Reading a text message while driving					
3	Driving a car which has not been well-maintained					
4	Eating food, such as a chocolate bar, while driving					
5	Driving a car while over the legal alcohol limit					
6	Talking on a <b>hand-held</b> mobile phone while driving					
7	Talking on a <b>hands-free</b> mobile phone while driving					
8	Changing a CD or radio station while driving					

Attitudes – Driver Safety

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour?  
(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	I would feel safe driving over the speed limit					
10	I would feel safe reading a text message while driving					
11	I would feel safe driving a car which has not been well-maintained					
12	I would feel safe eating food, such as a chocolate bar, while driving					
13	I would feel safe driving over the legal alcohol limit					
14	I would feel safe talking on a <b>hand-held</b> mobile phone while driving					
15	I would feel safe talking on a <b>hands-free</b> mobile phone while driving					

16	I would feel safe changing a CD or radio station while driving					
17	I would feel safe driving without wearing a seatbelt					

Attitudes – Police

Thinking only about the way that the police enforce **traffic law**, to what extent do you agree or disagree with the following statements?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18	The police enforce traffic law fairly					
19	The police make their decisions based on facts, not personal biases or opinions					
20	The police treat people with dignity and respect					
21	I have confidence that the police do their job well					
22	The police apply the rules consistently to different people					

To what extent do you agree or disagree with the following statements regarding the police **in general**?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23	In general, the police enforce the law fairly					
24	In general, the police make their decisions based on facts, not personal biases or opinions					
25	In general, the police treat people with dignity and respect					
26	I have confidence that the police do their job well					
27	In general, the police apply the rules consistently to different people					

Please answer the following questions thinking only about **your** experience of being stopped by the police that led to your attendance at Crash Course. To what extent do you agree or disagree with the following statements regarding **your** experience?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
28	The police enforced the law fairly					
29	The police made their decisions based on facts, not personal biases or opinions					
30	The police treated me with dignity and respect					
31	The outcome I received was fair					
32	I feel angry with the police					
33	I feel annoyed with myself for committing the offence					
34	I feel annoyed with myself for getting caught					
35	I feel ashamed of my behaviour					
36	I feel embarrassed					

#### Seatbelt and Mobile Phone Use

To what extent do you agree or disagree with the following statements regarding the use of seatbelts and mobile phones?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
37	It is quite acceptable to use a <b>hand-held</b> mobile phone while driving					
38	It is quite acceptable to use a <b>hands-free</b> mobile phone while driving					
39	It is quite acceptable <b>not</b> to wear a seatbelt while driving					
40	Using a <b>hand-held</b> phone while driving isn't really a serious problem					
41	Using a <b>hands-free</b> phone while driving isn't really a serious problem					
42	Not wearing a seatbelt while driving isn't really a serious problem					

Please read the following question and answer by ticking the appropriate box

		Highly Unlikely	Unlikely	Possibly	Likely	Highly Likely
43	If your <b>hand-held</b> phone starts ringing while you are driving, how likely do you think you are to answer the phone call?					

Which of the following do you think are acceptable reasons for using a **hand-held** phone while driving?

(Please tick all that apply)

44	Making important business/work-related calls	
	Letting people know you are ok	
	Making social calls	
	Checking emails/social media	
	Checking traffic announcements/alerts	
	Reading a map	
	Making calls to emergency services	
	Answering what could be an emergency phone call	
	None of the above	

Future intentions

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour? (Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
45	In the future, I will always obey speed limits					
46	In the future, I will avoid using a <b>hand-held</b> phone while driving at all times					
47	In the future, I will avoid using a <b>hands-free</b> phone while driving at all times					
48	In the future, I will wear my seatbelt at all times while driving					

Evaluation

Do you agree or disagree with the following statements about your experience of Crash Course? (Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
49	Crash Course really made me think about my behaviour on the road					
50	The information provided was very helpful					
51	The use of true, real-life examples was effective					
52	I already knew the information that was presented in Crash Course					
53	The material presented in Crash Course was relevant to me					

54	I will talk about Crash Course with other people					
----	--	--	--	--	--	--

Please read the following question and answer by ticking the appropriate box

		Very Poor	Poor	Neutral	Good	Very Good
55	What is your overall opinion of Crash Course?					

Please read the following question and answer by ticking the appropriate box

		Yes	No	Maybe
56	Will Crash Course change the way you drive?			

How would you compare the experience of Crash Course to the alternative of receiving a fixed penalty? (Please tick one box)

57	I would prefer a fixed penalty	
	I would prefer to be offered a course	
	I would not mind if I was offered a course or a fixed penalty	

58. Is there anything you would change about Crash Course?

59. Please provide any additional comments or suggestions you may have.

Please ensure that you are happy with all answers you have provided. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

I will be conducting further research looking at Crash Course and driver. Involvement in these additional aspects of the research will allow you to be entered into a prize draw with the chance of winning a £50 gift card of your choice, simply for taking part.

If you are happy to be contacted and entered into this prize draw then please leave your e-mail address or other means of contact below:

.....

Please feel free to contact me for further information or to voice your views using the e-mail address [l.savigar@keele.ac.uk](mailto:l.savigar@keele.ac.uk).

Thank you for completing this questionnaire.



## Follow-Up Questionnaire

### Crash Course and Driving Behaviour

This is the final questionnaire that you are being invited to complete by Leanne Savigar, a Keele University research student. You will be asked about your attitudes and behaviour as a driver as well as your thoughts of the Crash Course that you attended six months ago. The questionnaire should take no longer than 20 minutes to complete. Your participation is voluntary but is greatly appreciated. Completion of this questionnaire in no way influences your involvement with Crash Course and you may stop at any time should you wish to do so.

If you are happy with the information sheet that you have read and wish to take part in my research then please continue to complete this questionnaire. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

Please answer all questions as honestly as possible.

Please create your own unique participant number so that I can match your responses by providing:

The day of your birthday, *for example,*  
*if you were born on 23/04/1982 then you would enter 2 3*

--	--

The first three letters of the name of the place you were born, and,

--	--	--

The first and last letters of your mother's maiden name

--	--

Thank you in advance for taking part.



Attitudes – General Crash Risk

To what extent do you agree or disagree that each of the following behaviours **increases the risk** of a driver being involved in a crash?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Driving over the speed limit					
2	Reading a text message while driving					
3	Driving a car which has not been well-maintained					
4	Eating food, such as a chocolate bar, while driving					
5	Driving a car while over the legal alcohol limit					
6	Talking on a <b>hand-held</b> mobile phone while driving					
7	Talking on a <b>hands-free</b> mobile phone while driving					
8	Changing a CD or radio station while driving					

Attitudes – Driver Safety

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	I would feel safe driving over the speed limit					
10	I would feel safe reading a text message while driving					
11	I would feel safe driving a car which has not been well-maintained					
12	I would feel safe eating food, such as a chocolate bar, while driving					
13	I would feel safe driving over the legal alcohol limit					
14	I would feel safe talking on a <b>hand-held</b> mobile phone while driving					
15	I would feel safe talking on a <b>hands-free</b> mobile phone while driving					

16	I would feel safe changing a CD or radio station while driving					
17	I would feel safe driving without wearing a seatbelt					

Attitudes – Police

Thinking only about the way that the police enforce **traffic law**, to what extent do you agree or disagree with the following statements?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18	The police enforce traffic law fairly					
19	The police make their decisions based on facts, not personal biases or opinions					
20	The police treat people with dignity and respect					
21	I have confidence that the police do their job well					
22	The police apply the rules consistently to different people					

To what extent do you agree or disagree with the following statements regarding the police **in general**?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23	In general, the police enforce the law fairly					
24	In general, the police make their decisions based on facts, not personal biases or opinions					
25	In general, the police treat people with dignity and respect					
26	I have confidence that the police do their job well					
27	In general, the police apply the rules consistently to different people					

Please answer the following questions thinking only about **your** experience of being stopped by the police that led to your attendance at Crash Course. To what extent do you agree or disagree with the following statements regarding **your** experience?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
28	The police enforced the law fairly					
29	The police made their decisions based on facts, not personal biases or opinions					
30	The police treated me with dignity and respect					
31	The outcome I received was fair					
32	I feel angry with the police					
33	I feel annoyed with myself for committing the offence					
34	I feel annoyed with myself for getting caught					
35	I feel ashamed of my behaviour					
36	I feel embarrassed					

Your Behaviour

How often have **you** performed the following driver behaviours over the **last 6 months?**

(Please tick the appropriate box)

		Never	Hardly ever	Occasionally	Quite often	Nearly all the time
37	Driven over the speed limit					
38	Read a text message while driving					
39	Driven a car that has not been well-maintained					
40	Eaten food, such as a chocolate bar, while driving					
41	Driven whilst you suspect you are over the legal alcohol limit					
42	Spoken to somebody on a <b>hand-held</b> mobile phone while driving					
43	Spoken to somebody on a <b>hands-free</b> mobile phone while driving					
44	Changed a CD or radio station while driving					
45	Driven without wearing a seatbelt					

Seatbelt and Mobile Phone Use

To what extent do you agree or disagree with the following statements regarding the use of seatbelts and mobile phones?  
(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
46	It is quite acceptable to use a <b>hand-held</b> mobile phone while driving					
47	It is quite acceptable to use a <b>hands-free</b> mobile phone while driving					
48	It is quite acceptable <b>not</b> to wear a seatbelt while driving					
49	Using a <b>hand-held</b> phone while driving isn't really a serious problem					
50	Using a <b>hands-free</b> phone while driving isn't really a serious problem					
51	Not wearing a seatbelt while driving isn't really a serious problem					

Please read the following question and answer by ticking the appropriate box

		Highly Unlikely	Unlikely	Possibly	Likely	Highly Likely
52	If your <b>hand-held</b> phone starts ringing while you are driving, how likely do you think you are to answer the phone call?					

Which of the following do you think are acceptable reasons for using a **hand-held** phone while driving? (Please tick all that apply)

53	Making important business/work-related calls	
	Letting people know you are ok	
	Making social calls	
	Checking emails/social media	
	Checking traffic announcements/alerts	
	Reading a map	
	Making calls to emergency services	
	Answering what could be an emergency phone call	
	None of the above	

Future intentions

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour?  
(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
54	In the future, I will always obey speed limits					
55	In the future, I will avoid using a <b>hand-held</b> phone while driving at all times					
56	In the future, I will avoid using a <b>hands-free</b> phone while driving at all times					
57	In the future, I will wear my seatbelt at all times while driving					

### Evaluation

Do you agree or disagree with the following statements about your experience of Crash Course? (Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
58	Crash Course really made me think about my behaviour on the road					
59	The information provided was very helpful					
60	The use of true, real-life examples was effective					
61	I already knew the information that was presented in Crash Course					
62	The material presented in Crash Course was relevant to me					
63	I will talk about Crash Course with other people					

Please read the following question and answer by ticking the appropriate box

		Very Poor	Poor	Neutral	Good	Very Good
64	What is your overall opinion of Crash Course?					

Please read the following question and answer by ticking the appropriate box

		Yes	No
65	Has Crash Course changed the way you drive?		

How would you compare the experience of Crash Course to the alternative of receiving a fixed penalty? (Please tick one box)

66	I would prefer a fixed penalty	
	I would prefer to be offered a course	
	I would not mind if I was offered a course or a fixed penalty	

67. Is there anything you would change about Crash Course?

68. What do you remember most about the course?

69. Please provide any additional comments or suggestions you may have.

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## Questionnaire Debrief

I would like to take this opportunity to thank you for your participation in my research. Without your participation, this research could not be completed and we would be no wiser as to how Crash Course and other similar courses could be improved or expanded.

The questionnaires that you have completed will be used to develop suggestions of how to improve and further develop Crash Course. Additionally, as you have completed the questionnaires over a 6 month time period, this will allow a comparison to be made of your responses immediately after and 6 months after attending Crash Course.

This research design has been adopted based upon previous research that has generally found that individual's attitudes and behaviours improve immediately after attending a driver education course but that these improvements are not entirely maintained when questioned again 3-6 months later.

If you wish to find out more information regarding this research, the following references are a useful starting point:

Hoggarth, E., Anthony, D., Canton, R., Cartwright, I., Comfort, H., Payne, P., Shafiullah, M., Wood, J., & Yates, S. 2009. *Evaluation of the Crash Course: Report to Staffordshire Fire & Rescue Service*. De Montfort University: Leicester.

Additionally, the GOV.UK website has useful information regarding the use of mobile phones and seatbelts which can be obtained at the following links:

<https://www.gov.uk/using-mobile-phones-when-driving-the-law>

<https://www.gov.uk/seat-belts-law>

If you have any issues or concerns about any aspect of this study, feel free to contact myself, Leanne Savigar, at [l.savigar@keele.ac.uk](mailto:l.savigar@keele.ac.uk). Alternatively, if you do not wish to contact myself you may contact the academic supervisor of this project, Helen Wells, on 01782 733748 or [h.m.wells@keele.ac.uk](mailto:h.m.wells@keele.ac.uk).



## Pre-Course Questionnaire

### Education in road safety contexts

This is the first of three questionnaires that you are being invited to complete by Leanne Savigar, a Keele University research student. You will be asked about your attitudes and behaviour as a driver and the questionnaire should take no longer than 20 minutes to complete. Your participation is voluntary but is greatly appreciated and you may stop at any time should you wish to do so.

If you are happy with the information sheet that you have read and wish to take part then please continue to complete this questionnaire. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

Please answer all questions as honestly as possible.

Please create your own unique participant number so that I can match your responses across the different questionnaires by providing:

The day of your birthday, *for example,*  
*if you were born on 23/04/1982 then you would enter 2 3*

--	--

The first three letters of the name of the place you were born, and,

--	--	--

The first and last letters of your mother's maiden name

--	--

Thank you in advance for taking part.

Attitudes – General Crash Risk

To what extent do you agree or disagree that each of the following behaviours **increases the risk** of a driver being involved in a crash?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Driving over the speed limit					
2	Reading a text message while driving					
3	Driving a car which has not been well-maintained					
4	Eating food, such as a chocolate bar, while driving					
5	Driving a car while over the legal alcohol limit					
6	Talking on a <b>hand-held</b> mobile phone while driving					
7	Talking on a <b>hands-free</b> mobile phone while driving					
8	Changing a CD or radio station while driving					



Attitudes – Driver Safety

To what extent do you agree or disagree with the following statements regarding  
**your** driver behaviour?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	I would feel safe driving over the speed limit					
10	I would feel safe reading a text message while driving					
11	I would feel safe driving a car which has not been well-maintained					
12	I would feel safe eating food, such as a chocolate bar, while driving					
13	I would feel safe driving over the legal alcohol limit					
14	I would feel safe talking on a <b>hand-held</b> mobile phone while driving					
15	I would feel safe talking on a <b>hands-free</b> mobile phone while driving					
16	I would feel safe changing a CD or radio station while driving					
17	I would feel safe driving without wearing a seatbelt					

Attitudes – Police

Thinking only about the way that the police enforce **traffic law**, to what extent do you agree or disagree with the following statements?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18	The police enforce traffic law fairly					
19	The police make their decisions based on facts, not personal biases or opinions					
20	The police treat people with dignity and respect					
21	I have confidence that the police do their job well					
22	The police apply the rules consistently to different people					

To what extent do you agree or disagree with the following statements regarding the police **in general**?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23	In general, the police enforce the law fairly					
24	In general, the police make their decisions based on facts, not personal biases or opinions					
25	In general, the police treat people with dignity and respect					
26	I have confidence that the police do their job well					
27	In general, the police apply the rules consistently to different people					

Have you ever been caught speeding by a fixed or mobile speed camera?

(Please tick one box)

28	Yes	
	No	

Have you ever been pulled over by the police?

If no, please skip the following question and move onto the next section entitled 'Your Behaviour'.

(Please tick one box)

29	Yes	
	No	

Please answer this question if you have ever experienced being pulled over by the roads police. If you have been pulled over by the police on more than one occasion, please consider the **last time** you were pulled over by police only.

To what extent do you agree or disagree with the following statements regarding **your** experience?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
30	The police enforced the law fairly					
31	The police made their decisions based on facts, not personal biases or opinions					
32	The police treated me with dignity and respect					
33	The outcome I received was fair					
34	I feel angry with the police					
35	I feel annoyed with myself for committing the offence					
36	I feel annoyed with myself for getting caught					
37	I feel ashamed of my behaviour					

38	I feel embarrassed					
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Your Behaviour

How often have **you** performed the following driver behaviours over the **last 6 months?**

(Please tick the appropriate box)

		Never	Hardly ever	Occasionally	Quite often	Nearly all the time
39	Driven over the speed limit					
40	Read a text message while driving					
41	Driven a car that has not been well-maintained					
42	Eaten food, such as a chocolate bar, while driving					
43	Driven whilst you suspect you are over the legal alcohol limit					
44	Spoken to somebody on a <b>hand-held</b> mobile phone while driving					
45	Spoken to somebody on a <b>hands-free</b> mobile phone while driving					
46	Changed a CD or radio station while driving					
47	Driven without wearing a seatbelt					

Seatbelt and Mobile Phone Use

To what extent do you agree or disagree with the following statements regarding the use of seatbelts and mobile phones?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
48	It is quite acceptable to use a <b>hand-held</b> mobile phone while driving					
49	It is quite acceptable to use a <b>hands-free</b> mobile phone while driving					
50	It is quite acceptable <b>not</b> to wear a seatbelt while driving					
51	Using a <b>hand-held</b> phone while driving isn't really a serious problem					
52	Using a <b>hands-free</b> phone while driving isn't really a serious problem					
53	Not wearing a seatbelt while driving isn't really a serious problem					

Please read the following question and answer by ticking the appropriate box

		Highly Unlikely	Unlikely	Possibly	Likely	Highly Likely
54	If your <b>hand-held</b> phone starts ringing while you are driving, how likely do you think you are to answer the phone call?					

Which of the following do you think are acceptable reasons for using a **hand-held** phone while driving?

(Please tick all that apply)

55	Making important business/work-related calls	
	Letting people know you are ok	
	Making social calls	
	Checking emails/social media	
	Checking traffic announcements/alerts	
	Reading a map	
	Making calls to emergency services	
	Answering what could be an emergency phone call	
	None of the above	

Future intentions

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
56	In the future, I will always obey speed limits					
57	In the future, I will avoid using a <b>hand-held</b> phone while driving at all times					
58	In the future, I will avoid using a <b>hands-free</b> phone while driving at all times					
59	In the future, I will wear my seatbelt at all times while driving					

Your details

60. What is your age? (Please state) .....

What is your gender (Please tick one box)

61	Male	
	Female	

What is your ethnic group? (Please tick one box)

62	White	English/Welsh/Scottish/ Northern Irish/British	
		Irish	
		Gypsy or Irish Traveller	
		Other White background	
	Mixed/Multiple ethnic groups	White and Black Caribbean	
		White and Black African	
		White and Asian	
		Other Mixed background	
	Asian/Asian British	Indian	
		Pakistani	
		Bangladeshi	
		Chinese	
		Other Asian background	
	Black/African/ Caribbean/Black British	African	
		Caribbean	
		Other Black/African/Caribbean background	
	Other ethnic group	Arab	
		Any other ethnic group	

What is your current highest level of education? (Please tick one box)

63	Postgraduate qualification	
	Degree level qualification (or equivalent)	
	A level	
	ONC/ National level BTec	
	O level or GCSE	
	Other	
	No formal qualifications	

How many years driving experience do you have? (Please tick one box)

64	0-2	
	3-10	
	11+	

63. On average, how many miles do you drive in a typical year? (Please state)  
 ..... miles a year

On what road types do you spend most of your time driving? (Please tick one box)

65	Urban roads	
	Country roads	
	Motorways	

For what purposes do you spend most of your time driving? (Please tick one box)

66	Driving for work purposes	
	Commuting to a place of work	
	Social/Pleasure	
	Social/Pleasure and Work	

67. What is the date of the Crash Course that you are attending? (Please state)  
 .....

What previous motoring convictions have you had? (Please tick all that apply)

68	Speeding	
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Driving through a red light	
Drink driving	
Using a mobile phone	
Not wearing a seatbelt	
Other (Please specify .....)	
None	

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Please ensure that you are happy with all answers you have provided. By submitting this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

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I will be conducting further research looking at education in road safety contexts. Involvement in these additional aspects of the research will allow you to be entered into a prize draw with the chance of winning a £50 gift card of your choice, simply for taking part.

If you are happy to be contacted and entered into this prize draw then please leave your e-mail address or other means of contact below:

.....  
 .....

Please feel free to contact me for further information or to voice your views using the e-mail address [l.savigar@keele.ac.uk](mailto:l.savigar@keele.ac.uk).

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Thank you for completing this questionnaire.

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## Post-Course Questionnaire

### Education in road safety contexts

This is the second of three questionnaires that you are being invited to complete by Leanne Savigar, a Keele University research student. You will be asked about your attitudes towards driving and your thoughts about the Crash Course that you have just experienced. The questionnaire should take no longer than 20 minutes to complete. Your participation is voluntary but is greatly appreciated and you may stop at any time should you wish to do so.

If you are happy with the information that you have read and wish to take part then please continue to complete this questionnaire. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

Please answer all questions as honestly as possible.

Please create your own unique participant number so that I can match your responses by providing:

The day of your birthday, **for example,**  
**if you were born on 23/04/1982 then you would enter 2 3**

--	--

The first three letters of the name of the place you were born, and,

--	--	--

The first and last letters of your mother's maiden name

--	--

Thank you in advance for taking part.

Attitudes – General Crash Risk

To what extent do you agree or disagree that each of the following behaviours  
**increases the risk** of a driver being involved in a crash?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Driving over the speed limit					
2	Reading a text message while driving					
3	Driving a car which has not been well-maintained					
4	Eating food, such as a chocolate bar, while driving					
5	Driving a car while over the legal alcohol limit					
6	Talking on a <b>hand-held</b> mobile phone while driving					
7	Talking on a <b>hands-free</b> mobile phone while driving					
8	Changing a CD or radio station while driving					

Attitudes – Driver Safety

To what extent do you agree or disagree with the following statements regarding  
**your** driver behaviour?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	I would feel safe driving over the speed limit					
10	I would feel safe reading a text message while driving					
11	I would feel safe driving a car which has not been well-maintained					
12	I would feel safe eating food, such as a chocolate bar, while driving					
13	I would feel safe driving over the legal alcohol limit					
14	I would feel safe talking on a <b>hand-held</b> mobile phone while driving					
15	I would feel safe talking on a <b>hands-free</b> mobile phone while driving					
16	I would feel safe changing a CD or radio station while driving					
17	I would feel safe driving without wearing a seatbelt					

Attitudes – Police

Thinking only about the way that the police enforce **traffic law**, to what extent do you agree or disagree with the following statements?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18	The police enforce traffic law fairly					
19	The police make their decisions based on facts, not personal biases or opinions					
20	The police treat people with dignity and respect					
21	I have confidence that the police do their job well					
22	The police apply the rules consistently to different people					

To what extent do you agree or disagree with the following statements regarding the police **in general**?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23	In general, the police enforce the law fairly					
24	In general, the police make their decisions based on facts, not personal biases or opinions					
25	In general, the police treat people with dignity and respect					
26	I have confidence that the police do their job well					
27	In general, the police apply the rules consistently to different people					

Have you ever been caught speeding by a fixed or mobile speed camera?

(Please tick one box)

28	Yes	
	No	

Have you ever been pulled over by the police?

If no, please skip the following question and move onto the next section entitled 'Seatbelt and Mobile Phone Use'.

(Please tick one box)

29	Yes	
	No	

Please answer the questions in this section if you have ever experienced being pulled over by the roads police. If you have been pulled over by the police on more than one occasion, please consider the **last time** you were pulled over by police only.

To what extent do you agree or disagree with the following statements regarding **your** experience?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
30	The police enforced the law fairly					
31	The police made their decisions based on facts, not personal biases or opinions					
32	The police treated me with dignity and respect					
33	The outcome I received was fair					
34	I feel angry with the police					
35	I feel annoyed with myself for committing the offence					
36	I feel annoyed with myself for getting caught					
37	I feel ashamed of my behaviour					

38	I feel embarrassed					
----	--------------------	--	--	--	--	--

Seatbelt and Mobile Phone Use

To what extent do you agree or disagree with the following statements regarding the use of seatbelts and mobile phones?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
39	It is quite acceptable to use a <b>hand-held</b> mobile phone while driving					
40	It is quite acceptable to use a <b>hands-free</b> mobile phone while driving					
41	It is quite acceptable <b>not</b> to wear a seatbelt while driving					
42	Using a <b>hand-held</b> phone while driving isn't really a serious problem					
43	Using a <b>hands-free</b> phone while driving isn't really a serious problem					
44	Not wearing a seatbelt while driving isn't really a serious problem					

Please read the following question and answer by ticking the appropriate box

		Highly Unlikely	Unlikely	Possibly	Likely	Highly Likely
45	If your <b>hand-held</b> phone starts ringing while you are driving, how likely do you think you are to answer the phone call?					

Which of the following do you think are acceptable reasons for using a **hand-held** phone while driving?

(Please tick all that apply)

46	Making important business/work-related calls	
----	--	--

Letting people know you are ok	
Making social calls	
Checking emails/social media	
Checking traffic announcements/alerts	
Reading a map	
Making calls to emergency services	
Answering what could be an emergency phone call	
None of the above	

Future intentions

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
47	In the future, I will always obey speed limits					
48	In the future, I will avoid using a <b>hand-held</b> phone while driving at all times					
49	In the future, I will avoid using a <b>hands-free</b> phone while driving at all times					
50	In the future, I will wear my seatbelt at all times while driving					



Evaluation

Do you agree or disagree with the following statements about your experience of Crash Course? (Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
51	Crash Course really made me think about my behaviour on the road					
52	The information provided was very helpful					
53	The use of true, real-life examples was effective					
54	I already knew the information that was presented in Crash Course					
55	The material presented in Crash Course was relevant to me					
56	I will talk about Crash Course with other people					

Please read the following question and answer by ticking the appropriate box

		Very Poor	Poor	Neutral	Good	Very Good
57	What is your overall opinion of Crash Course?					

Please read the following question and answer by ticking the appropriate box

		Yes	No	Maybe
58	Will Crash Course change the way you drive?			

If you were caught using a mobile phone or not wearing a seatbelt while driving which of the following would you prefer? (Please tick one box)

59	I would prefer a fixed penalty	
	I would prefer to be offered a course	
	I would not mind if I was offered a course or a fixed penalty	

60. Is there anything you would change about Crash Course?

61. Please provide any additional comments or suggestions you may have.

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Please ensure that you are happy with the answers you have provided. By submitting this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

---

I will be conducting further research looking at education in road safety contexts. Involvement in these additional aspects of the research will allow you to be entered into a prize draw with the chance of winning a £50 gift card of your choice, simply for taking part.

If you are happy to be contacted and entered into this prize draw then please leave your e-mail address or other means of contact below:

.....  
.....

Please feel free to contact me for further information or to voice your views using the e-mail address [l.savigar@keele.ac.uk](mailto:l.savigar@keele.ac.uk).

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Thank you for completing this questionnaire.

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## Follow-Up Questionnaire

### Education in road safety contexts

This is the final questionnaire that you are being invited to complete by Leanne Savigar, a Keele University research student. You will be asked about your attitudes and behaviour as a driver. The questionnaire should take no longer than 20 minutes to complete. Your participation is voluntary but is greatly appreciated and you may stop at any time should you wish to do so.

If you are happy with the information sheet that you have read and wish to take part in my research then please continue to complete this questionnaire. By completing this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

Please answer all questions as honestly as possible.

Please create your own unique participant number so that I can match your responses across the different questionnaires by providing:

The day of your birthday, *for example,*  
*if you were born on 23/04/1982 then you would enter 2 3*

--	--

The first three letters of the name of the place you were born, and,

--	--	--

The first and last letters of your mother's maiden name

--	--

Thank you in advance for taking part.

Attitudes – General Crash Risk

To what extent do you agree or disagree that each of the following behaviours **increases the risk** of a driver being involved in a crash?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Driving over the speed limit					
2	Reading a text message while driving					
3	Driving a car which has not been well-maintained					
4	Eating food, such as a chocolate bar, while driving					
5	Driving a car while over the legal alcohol limit					
6	Talking on a <b>hand-held</b> mobile phone while driving					
7	Talking on a <b>hands-free</b> mobile phone while driving					
8	Changing a CD or radio station while driving					

Attitudes – Driver Safety

To what extent do you agree or disagree with the following statements regarding  
**your** driver behaviour?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	I would feel safe driving over the speed limit					
10	I would feel safe reading a text message while driving					
11	I would feel safe driving a car which has not been well-maintained					
12	I would feel safe eating food, such as a chocolate bar, while driving					
13	I would feel safe driving over the legal alcohol limit					
14	I would feel safe talking on a <b>hand-held</b> mobile phone while driving					
15	I would feel safe talking on a <b>hands-free</b> mobile phone while driving					
16	I would feel safe changing a CD or radio station while driving					
17	I would feel safe driving without wearing a seatbelt					

Attitudes – Police

Thinking only about the way that the police enforce **traffic law**, to what extent do you agree or disagree with the following statements?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
18	The police enforce traffic law fairly					
19	The police make their decisions based on facts, not personal biases or opinions					
20	The police treat people with dignity and respect					
21	I have confidence that the police do their job well					
22	The police apply the rules consistently to different people					

To what extent do you agree or disagree with the following statements regarding the police **in general**?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23	In general, the police enforce the law fairly					
24	In general, the police make their decisions based on facts, not personal biases or opinions					
25	In general, the police treat people with dignity and respect					
26	I have confidence that the police do their job well					
27	In general, the police apply the rules consistently to different people					

Have you ever been caught speeding by a fixed or mobile speed camera?

(Please tick one box)

28	Yes	
	No	

Have you ever been pulled over by the police?

If no, please skip the following question and move onto the next section entitled 'Your Behaviour'.

(Please tick one box)

29	Yes	
	No	

Please answer the questions in this section if you have ever experienced being pulled over by the roads police. If you have been pulled over by the police on more than one occasion, please consider the **last time** you were pulled over by police only.

To what extent do you agree or disagree with the following statements regarding **your** experience?

(Please tick the appropriate box)

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
30	The police enforced the law fairly					
31	The police made their decisions based on facts, not personal biases or opinions					
32	The police treated me with dignity and respect					
33	The outcome I received was fair					
34	I feel angry with the police					
35	I feel annoyed with myself for committing the offence					
36	I feel annoyed with myself for getting caught					
37	I feel ashamed of my behaviour					
38	I feel embarrassed					



Your Behaviour

How often have **you** performed the following driver behaviours over the **last 6 months?**

(Please tick the appropriate box)

		Never	Hardly ever	Occasionally	Quite often	Nearly all the time
39	Driven over the speed limit					
40	Read a text message while driving					
41	Driven a car that has not been well-maintained					
42	Eaten food, such as a chocolate bar, while driving					
43	Driven whilst you suspect you are over the legal alcohol limit					
44	Spoken to somebody on a <b>hand-held</b> mobile phone while driving					
45	Spoken to somebody on a <b>hands-free</b> mobile phone while driving					
46	Changed a CD or radio station while driving					
47	Driven without wearing a seatbelt					

Seatbelt and Mobile Phone Use

To what extent do you agree or disagree with the following statements regarding the use of seatbelts and mobile phones?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
48	It is quite acceptable to use a <b>hand-held</b> mobile phone while driving					
49	It is quite acceptable to use a <b>hands-free</b> mobile phone while driving					
50	It is quite acceptable <b>not</b> to wear a seatbelt while driving					
51	Using a <b>hand-held</b> phone while driving isn't really a serious problem					
52	Using a <b>hands-free</b> phone while driving isn't really a serious problem					
53	Not wearing a seatbelt while driving isn't really a serious problem					

Please read the following question and answer by ticking the appropriate box

		Highly Unlikely	Unlikely	Possibly	Likely	Highly Likely
54	If your <b>hand-held</b> phone starts ringing while you are driving, how likely do you think you are to answer the phone call?					

Which of the following do you think are acceptable reasons for using a **hand-held** phone while driving?

(Please tick all that apply)

55	Making important business/work-related calls	
	Letting people know you are ok	
	Making social calls	
	Checking emails/social media	
	Checking traffic announcements/alerts	
	Reading a map	
	Making calls to emergency services	
	Answering what could be an emergency phone call	
	None of the above	

Future intentions

To what extent do you agree or disagree with the following statements regarding **your** driver behaviour?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
56	In the future, I will always obey speed limits					
57	In the future, I will avoid using a <b>hand-held</b> phone while driving at all times					
58	In the future, I will avoid using a <b>hands-free</b> phone while driving at all times					
59	In the future, I will wear my seatbelt at all times while driving					

Evaluation

Do you agree or disagree with the following statements about your experience of Crash Course?

(Please tick the appropriate box)

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
60	Crash Course really made me think about my behaviour on the road					
61	The information provided was very helpful					
62	The use of true, real-life examples was effective					
63	I already knew the information that was presented in Crash Course					
64	The material presented in Crash Course was relevant to me					
65	I will talk about Crash Course with other people					

Please read the following question and answer by ticking the appropriate box

		Very Poor	Poor	Neutral	Good	Very Good
66	What is your overall opinion of Crash Course?					

Please read the following question and answer by ticking the appropriate box

		Yes	No
67	Has Crash Course changed the way you drive?		

How would you compare the experience of Crash Course to the alternative of receiving a fixed penalty If you were caught using a mobile phone or not wearing a seatbelt while driving? (Please tick one box)

68	I would prefer a fixed penalty	
	I would prefer to be offered a course	
	I would not mind if I was offered a course or a fixed penalty	

69. Is there anything you would change about Crash Course?

70. What do you remember most about the course?

71. Please provide any additional comments or suggestions you may have.

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Please ensure that you are happy with all answers you have provided. By submitting this questionnaire you are agreeing that you are happy to take part in the study and for the answers you provide to be used in analysis. Your information will remain anonymous.

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P.T.O

## Questionnaire Debrief

I would like to take this opportunity to thank you for your participation in my research. Your participation has provided useful information about how Crash Course and other similar courses could be improved or expanded.

The questionnaires that you have completed will be used to develop suggestions of how to improve and further develop Crash Course. Additionally, as you have completed the questionnaires over a 6 month time period, this will allow a comparison to be made of your responses immediately after and 6 months after attending Crash Course. This will be compared to answers provided by those who have chosen to attend Crash Course rather than receive a fine and/or penalty points when caught using a mobile phone or not wearing a seatbelt while driving.

This research design has been adopted based upon previous research that has generally found that individual's attitudes and behaviours improve immediately after attending a driver education course but that these improvements are not entirely maintained when questioned again 3-6 months later.

If you wish to find out more information regarding this research, the following references are a useful starting point:

Hoggarth, E., Anthony, D., Canton, R., Cartwright, I., Comfort, H., Payne, P., Shafiullah, M., Wood, J., & Yates, S. 2009. *Evaluation of the Crash Course: Report to Staffordshire Fire & Rescue Service*. De Montfort University: Leicester.

Additionally, the GOV.UK website has useful information regarding the use of mobile phones and seatbelts which can be obtained at the following links:

<https://www.gov.uk/using-mobile-phones-when-driving-the-law>

<https://www.gov.uk/seat-belts-law>

If you have any issues or concerns about any aspect of this study, feel free to contact myself, Leanne Savigar, at [l.savigar@keele.ac.uk](mailto:l.savigar@keele.ac.uk). Alternatively, if you do not wish to contact myself you may contact Helen Wells, the academic supervisor of this project, on 01782 733748 or [h.m.wells@keele.ac.uk](mailto:h.m.wells@keele.ac.uk).

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Appendix J – Offender and employer email invitation from Crash Course presenters

Offender email

As you have chosen to attend Crash Course, you are invited to take part in research that aims to understand driver behaviour and the impact of Crash Course.

To access the survey please click the following link before you attend:-

<http://www.smartsurvey.co.uk/s/KeeleDriverStudy>

This research is being conducted by Leanne Savigar, who is a PHD student at Keele University.

All information is completely confidential and cannot be accessed by any Staffordshire Police Employee.

#### Employee email

As you have chosen Crash Course to be delivered to your employees, they are invited to take part in research that aims to understand driver behaviour and the impact of Crash Course. It would be appreciated if you could pass on the following to your employees who will be attending the course:

As part of your attendance at Crash Course, you are invited to take part in research that aims to understand driver behaviour and the impact of Crash Course.

To access the survey please click the following link before you attend:-

<http://www.smartsurvey.co.uk/s/KeeleDriverStudy>

This research is being conducted by Leanne Savigar, who is a PHD student at Keele University.

## Appendix K – Course attendee interview invitation email draft

Dear Crash Course attendee,

You are being contacted as you have recently taken part in a questionnaire study looking at Crash Course and driver behaviour being conducted by Leanne Savigar, a research student at Keele University. Crash Course was a driver awareness course presenting the risks of dangerous driver behaviour, organised by your employer within the last six months. Your participation in that aspect of the research was vital to Leanne's research and greatly appreciated.

You are now being invited to take part in an additional aspect of the same research project that is focused on gaining more in-depth information from people who have experienced Crash Course and are happy to talk about their experience.

This part of the research project would allow you to voice your opinions and experiences in an interview format, taking place via telephone. You would be asked a number of questions regarding your attitudes and behaviour as a driver as well as your experience of Crash Course. By participating in an interview, you would again be entered into a prize draw with a chance of winning a £50 gift card of your choice.

If you are interested in taking part in this aspect of the research then please take the time to read the attached information sheet that provides more information regarding why this research is being conducted and what it will involve.

If you are happy to take part in an interview, or if you have any questions about any aspect of the research, then please send an email to the following email address: [l.savigar@keele.ac.uk](mailto:l.savigar@keele.ac.uk), or simply reply to this email. Your participation is important in gaining an understanding of Crash Course and driver behaviour, and for you to have the opportunity to voice your opinions about your experience.

Kind regards,  
Leanne Savigar



## Appendix L – Offender and employee course attendee interview guides

### Offender

I would like to start this interview by asking about your behaviour as a driver.

1. Can you describe your general driver behaviour/vehicle usage?
  - How often/where do you drive?
  - How safe do you feel when driving?

### Experience of being caught

I would like to continue by talking about your experience with the police and the processes that led to your attendance at Crash Course.

2. Can you describe your experience of being stopped by the police that led to your attendance at Crash Course?
3. How did you feel during your encounter with the police?
  - Did your feelings change throughout the encounter?
4. How would you describe the way you were treated by the police?

### Experience of Crash Course

I am going to move on now to discussing your experience of Crash Course and your attitudes and behaviour as a driver.

5. How did you make the decision to attend Crash Course?
  - What were your reasons for choosing to attend Crash Course over penalty points/a fine?
6. How would you describe your experience of Crash Course?
  - What are your thoughts about the course?
7. How did Crash Course make you feel?
8. Do you think the discussion of personal experiences influences the impact of Crash Course?
  - Do you think you would prefer a course with or without these personal stories?

### After Crash Course

I would like you to think now about your own personal behaviour before and after the course.

9. How has your behaviour as a driver changed since Crash Course, if at all?
  - Why do you think that is?
  - How likely are you to commit traffic offences in the future?
  
10. How have your perceptions of emergency service employees, such as the police, changed since Crash Course, if at all?
  - Why do you think that is?

### Evaluation of Crash Course

Moving onto your thoughts of Crash Course now...

11. How do you think Crash Course compares to the alternative of receiving penalty points and/or a fine?
  - Which do you think is more likely to change attitudes towards driving offences and driver behaviour?
  
12. Crash Course is also offered to groups of employees who have not necessarily been caught committing a traffic offence.  
Do you think Crash Course would be useful to those who have not been caught committing an offence?
  - How would you have felt if your experience of Crash Course was not as a punishment, but organised by your employer?
  
13. Finally, is there anything you would change about Crash Course?
  - Do you think the presentation is a useful format or would you prefer more group work/discussion?

That is the end of the questions, is there anything else you would like to add, or discuss?

## Employee

I would like to start this interview by asking about your behaviour as a driver.

1. Can you describe your general driver behaviour/vehicle usage?
  - How often/where do you drive?
  - How safe do you feel when driving?

## Experiences of being caught

I would like to continue by talking about any experiences you may have had with the police whilst driving and the processes that followed.

2. Have you ever been pulled over by the police for committing a motoring offence (or any other reason)?

If yes...

3. Can you describe this/your most recent experience of being pulled over by the police?
  - How was the offence dealt with (points/fine/course)?
  - Would you have preferred an alternative course of action?
4. How did you feel during your encounter with the police?
5. How would you describe the way you were treated by the police?

If no continue to question 6...

## Experience of Crash Course

I am going to move on now to discussing your experience of Crash Course and your attitudes and behaviour as a driver.

6. How were you informed that you would be attending Crash Course?
  - How did you feel when you were told?
7. How would you describe your experience of Crash Course?
  - What are your thoughts about the course?
8. How did Crash Course make you feel?
9. Do you think the discussion of personal experiences influences the impact of Crash Course?
  - Do you think you would prefer a course with or without these personal stories?

### After Crash Course

I would like you to think now about your own personal behaviour before and after the course.

10. How has your behaviour as a driver changed since Crash Course, if at all?
  - Why do you think that is?
  - How likely are you to commit traffic offences in the future?
11. How have your perceptions of emergency service employees, such as the police, changed, if at all?
  - Why do you think that is?

### Evaluation of Crash Course

Moving onto your thoughts of Crash Course now...

12. Crash Course is also offered as an alternative to receiving penalty points/a fine when caught committing certain traffic offences in Staffordshire. How do you think Crash Course compares to the alternative of receiving penalty points and/or a fine?
  - Which do you think is more successful in changing driver attitudes and behaviour?
13. Do you think Crash Course is an appropriate penalty for committing a traffic offence?
  - How would you have felt if your experience of Crash Course was a punishment of a traffic offence?
14. Finally, is there anything you would change about Crash Course?
  - Do you think the presentation is a useful format or would you prefer more group work/discussion?

That is the end of the questions, is there anything else you would like to add, or discuss?

## Appendix M - Police officer interview guide

### **Introductory Questions**

I would like to start this interview by asking you a little bit about yourself and your knowledge of Crash Course.

#### About you

1. Could you please begin by describing an average day in your role within the police?
  - Had you enforced seatbelt/mobile phone laws before Crash Course was introduced?
  
2. What do you know about Crash Course?

### **Enforcing mobile phone and seat belt laws**

I would like to ask you now about your opinions of mobile phone and seatbelt enforcement and for you to particularly think about your own personal experiences and the behaviour of offenders.

#### Reactions to being caught

3. From your experience, how do people generally react when they have been caught using a phone or not wearing a seatbelt?
  - Do different groups of people react differently?
  
4. And how do they react when they are offered Crash Course?
  - Are there any differences to when they are told they will receive points/fines?

#### Experiences of enforcement

5. How do you describe an offer of Crash Course to offenders?
  
6. How do you think an offer of Crash Course influences the interaction between police and offenders?

(Only if they have enforced laws before Crash Course was introduced)

7. How has your experience of enforcing mobile phone and seatbelt laws changed since the introduction of Crash Course?

### **The development of Crash Course**

Thinking more about the use of education...

#### Crash Course vs. penalty points

8. What do you think about Crash Course being used as an alternative to receiving points or a fine?
  - What influence do you think that receiving points or a fine has on dangerous driving attitudes and behaviour?

- How would you compare that to the influence that you think Crash Course has on dangerous driving attitudes and behaviour?

### **Beyond Crash Course**

In this final section, I would like to ask you more generally about improving enforcement and the use of education as an alternative to prosecution.

#### Improving law enforcement

9. How do you think the process of enforcing traffic law could be improved?
10. How do you think that traffic officers could benefit from attending Crash Course, if at all?

#### Education in the criminal justice system

11. Finally, how do you think that education could be used as an alternative to prosecution more widely in the criminal justice system?

Thank you for answering my questions, is there anything else you would like to add or discuss before I stop the recording?

## Appendix N – Crash Course presenter interview guide

I would like to start this interview by asking you a little bit about yourself.

### About you

1. Could you please begin by explaining how you have come to be a part of the Crash Course team and the role that you play?

### The development of Crash Course

Ok, I would like to move on now to discussion of how education has come to be developed as an alternative to receiving points and fines.

### Crash Course vs. penalty points

2. What do you think about Crash Course being used as an alternative to receiving points or a fine?
  - What influence do you think that receiving points or a fine has on dangerous driving attitudes and behaviour?
  - How would you compare that to the influence you think Crash Course has on dangerous driving attitudes and behaviour?
  -

### Experiences of Crash Course

I would like you now to particularly think about your own personal experiences of presenting Crash Course and the behaviour of attendees.

### Reactions to Crash Course

3. From your experience, how do people generally react to Crash Course?
  - Do different people react differently?
4. How does the experience of delivering Crash course impact on you as a presenter?

### Benefits of Crash Course

5. What is it about Crash Course that you think leads to attitude and behaviour change in relation to dangerous driving?
6. Do you think that Crash Course is more effective in changing attitudes and behaviour with certain groups of people, e.g., males/females, young/old?
7. What other benefits do you think Crash Course provides?

### Beyond Crash Course

In this final section, I would like to ask your thoughts about the future possibilities of Crash Course and the use of education more generally as an alternative to prosecution.

### Developing Crash Course

8. How do you think that Crash Course could be improved?

9. What do you think about using Crash Course as a model that could be expanded nationally?

- What do you think about the recruitment of additional Crash Course teams?

10. Do you think that the concept of Crash Course could be adapted to other motoring offences?

Education in the criminal justice system

11. Finally, how do you think that education could be used as an alternative to prosecution more widely in the criminal justice system?

Thank you for answering my questions, is there anything else you would like to add or discuss before I stop the recording?

Thank you for taking part.



## Appendix O - Observation coding log

Observer Group type:	Offender	Employee	
Venue:	Cannock	Keele	Other
Date:			

Environment

Group composition

Group Formation

Conversation

Reactions

Other

Appendix P – Results of an offender paired t-test at pre-course and follow-up for behavioural frequency of talking on a handheld mobile phone while driving in the last six months

**Paired samples statistics**

	Mean	N	SD
Handheld behaviour pre-course	1.79	29	.861
Handheld behaviour follow-up	1.17	29	.384

**Paired samples test**

	Mean	SD	95% CI Lower	95% CI Upper	t	df	Sig. (2 tailed)
Handheld behaviour pre-course & Handheld behaviour follow-up	.621	.820	.152	.309	4.076	28	.000

Appendix Q – Results of an employee paired t-test for behavioural frequency of mobile phone offending behaviour in the last six months comparing those who use a vehicle for work purposes and those who use a vehicle for domestic/pleasure purposes

Group statistics

		Mean	N	SD
Employee mobile phone offending behaviour	Drives for work purposes	3.29	178	.10
	Does not drive for work purposes	2.14	7	.14

Independent samples test

Employee mobile phone offending behaviour	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	95% confidence interval lower	95% confidence interval upper
Equal variances assumed	8.93	.00	2.22	183	.027	1.15	.13	2.17

Appendix R – Estimated marginal means plot comparing males and females with under 26's, 26-40's, and those aged 41+ in perceptions of risk on the roads

