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Investigating the celebrity effect: the influe	ence of celebrities on children's and young adu	ults
explicit and imp	olicit attitudes to brands	

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Abstract

Research suggests that as children develop so too does their ability to identify the persuasive intent of advertising, but research examining whether implicit cognitive processes play a part in children's response to advertising has been neglected, as has the importance of scepticism. This thesis focuses upon one specific advertising technique pairing celebrities with brands. **Studies 1 and 2** presented novel brands paired with either a well-liked celebrity or neutrally rated non-celebrity. Findings demonstrated explicit and implicit preferences for brands paired with a well-liked celebrity. **Study 3** used real brands and a scepticism scale. An overall preference for celebrity paired brands was revealed, with scepticism to advertising showing to be important. Studies 4 and 5 examined known (rather than "well-liked") celebrities. Brands presented alone or paired with a known celebrity were shown, with an explicit preference for brands presented alone being found. **Study 6** used well-liked and known celebrities. An explicit preference for well-liked celebrity brands, yet a brand alone preference for known celebrity brands was shown. A small implicit preference for celebrity brands was shown in the known celebrity group, also showing high affect-based scepticism was associated with high implicit preference. Both high accuracy- and affect-based scepticism was associated with lower brand alone scores for the well-liked celebrity condition, whereas findings of the known celebrity subgroup seem to suggest that a known celebrity overrides scepticism. Differences across age groups emerged. Overall this thesis suggests that the celebrity effect is not straightforward – children and young adults respond differently to brands paired with celebrities they have high liking for compared with those that are simply known. Explicit and implicit responses to celebrity brands can differ, and it may be important to consider the distinct effects of both accuracy- and affect-based scepticism on the judgments of children in different age group

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1 Literature Review

1.1 Advertising to children

1.1.1 General Introduction

Children and young people are considered to be a lucrative market and one that generates a vast amount of spending (Clarke & Svanaes, 2012). Children have access to financial resources. As well as pocket money and birthday money, children also have influential input into the spending of their parents (Buijzen & Valkenburg, 2008) and other family members such as grandparents (Buckingham, 2009). In 2005, Gunter, Oates, & Blades suggested that on average, parents in the United Kingdom spent more than £7 per week extra on food shopping when they took their children to the supermarket with them as they "pester" for food or toys that they have seen advertised on the television. Pester power continues to remain an effective method for children, with more recent research by Childwise (2018) estimating that it accounts for £7,960 million per year of UK spending.

Advertisers who rely upon television commercials have targeted several generations of children (Kunkel et al., 2004). At the beginning of the 21st century it was estimated that the average child observed approximately 18,000 advertisements each year (Oates, Blades, & Gunter, 2001) – a figure which in 2014, was reported to have increased to 25,600 (Common Sense Media). In 2002 it was estimated that children and teenagers in the UK and US spent, on average, four to five hours every day, outside of school time, watching some form of electronic media (Cooke, 2002, cited in Gunter et al., 2005). A more recent Ofcom report (2016) supports these findings, highlighting that using digital and electronic media remains important to children, with nearly all children engaging with "watching activity" (for example, TV, online clips, on-demand channels) at least once per week. On average, it was estimated that children spend approximately one hour more at a weekend than a school day using media, with children aged eight- to 11-years spending approximately seven hours per weekend day watching TV and engaging in online gaming (Ofcom, 2016). It has been suggested that the UK transmits more television advertisements than any other European country (Layard & Dunn, 2009) and whilst consumption of TV ads may have reduced over the last few years, with the increase of Netflix and Internet viewing, there is no reason to believe that exposure to ads has reduced significantly in recent years. Whilst watching TV remains a daily occurrence for most children (estimated at nine out of ten), the number of children who report watching a television has generally decreased in favour of watching programmes, YouTube clips and on-demand programmes on portable, electronic devices (Ofcom, 2016). Wakefield (2015) reports on a survey conducted by Childwise which concluded that in comparison to three-and-a-half hours of TV viewing in 1995, teenage girls now spend an average of seven-and-a-half- hours watching screens.

A recent report highlights how easy it is in our current society for children to watch television programmes, revealing that 40% of children aged five- to 15-years now own an electronic device on which they can watch television programmes on demand (Ofcom, 2016). Tablet ownership is on the rise, with 16% of children as young as three-years-old now owning their own device. The use of tablets as a way to stream content electronically is

above 50% for children of all ages, with 55% of three- to four- year-olds, 67% of five- to seven-year-olds, 80% of eight- to 11-year-olds, and 74% of 12- to 15-year-olds now having regular access to an electronic tablet (Ofcom, 2016). The results of a survey of the general public's attitudes towards advertising suggested that although most people take a fairly benign view of advertising, this may not be the case where advertising to children is concerned. Fraser and McBain (2011), for example, stated that whilst advertising causes few problems for much of the consumer population (those who can observe it rationally and with scepticism), there are some that need to be protected. Young children, for example, are considered to be a vulnerable group and a cause for worry.

Advertising to children has therefore become a cause for concern, with the consensus being that children are a vulnerable group that need protective regulations to guard them from the effects of advertising (e.g. see Kunkel et al., 2004). Making reference to policy and practice concerning advertising in the US, Kunkel et al. (2004) discussed efforts to reduce advertising to children. However, for guidelines and regulations to be introduced in an attempt to reduce the negative effects of advertising to children, it is necessary to understand the processes that determine how advertising affects the judgments, behaviour, and perceptions of children (Büttner, Florack, & Serfas, 2014). Heath (2012) has claimed that product preference has been shown to be influenced by as little as a single commercial exposure, strengthened with repeated exposures with product preferences affecting children's product purchase requests which in turn influence parents' purchasing decisions. This points to the importance of understanding how children respond to advertising.

Research has demonstrated that high-exposure to adverts can have a negative effect on children's development, particularly in terms of their response to branded products. In one study, for example, Weller (2002) found that children could recognize brands and logos before they could read, which in itself is worrying. The increase in popular TV programmes and specific TV channels designed for very young children has opened up new promotion opportunities for advertising to even younger age groups than before (Hind, 2003, cited in Gunter et al., 2005). In 2005, research estimated that in the UK alone two-thirds of children aged between seven- and 10-years had a television in their bedrooms (Gunter et al.), and in recent years media platforms for advertising to children via the internet, continue to emerge (Gunter et al., 2005). It is likely that the number of new advertising platforms will continue to increase, as will estimates of the time children spend gaming or using electronic media. Following some of the theoretical perspectives of children's development, it is believed that children, more than adults, are susceptible to the seductive influence of commercials and, whilst parents can try to monitor the amount of advertisements that children are exposed to, it is not always possible for parents to have full control over the content children are viewing. Evidence is mixed for the age at which an adult-like understanding of advertisements emerges which might protect children from any adverse effects of advertising. Research concerning the age at which children's understanding develops is discussed in section 1.1.2.

1.1.2 Recognising ads and understanding children's selling and persuasive intent

Advertising to children is becoming increasingly common, especially considering that more children than ever now have access to some sort of electronic media on which accessing advertisements remains highly likely. Levin, Petros, and Petrella (1982) established that even young children can distinguish television programmes from advertising. Researchers claim that if a child can make a distinction between advertising and programmes on television, as children around the age of five years can (Clarke, 2011), they therefore understand the intent of advertising. Research which has investigated the effects of advertising on children has tended to focus on children's knowledge of selling intent (i.e., understanding that ads are trying to sell their products) and persuasive intent (i.e. understanding that advertisements are designed to persuade you to think or do something). Selling intent and persuasive intent are two terms that are used widely throughout the research literature. Young (1990) identified a difference between understanding commercial intent behind advertising (intention to sell) and persuasive intent (intention to persuade), claiming that children need to understand that behind advertising lies a message to promote a product, and that the function of the advertisement is to do just that. One such function is to persuade, however the age at which children fully understand this remains widely debated.

Research tends to suggest that at around five-years of age children distinguish between television programmes and advertisements, but only in terms of basic features such as duration and content, rather than the 'persuasive intent' which lies behind the advertisement (Butter, Popovich, Stackhouse, & Garner, 1981). Very young children have minimal understanding of what an advertisement is (Calvert, 1999), with research suggesting that before the age of eight- or nine-years children do not necessarily understand all content that they view on the television. Often, very young children have difficulty following a causal link between the beginning, middle and end of a programme or advertisement, with a struggle to comprehend that characters are fictitious and do not represent everyday life (Wright, Huston, Reitz, & Piemyat, 1994). Consequently, young children are able to say how advertisements are different from television programmes (e.g. they are shorter, or funnier) but not why they are different (Levin et al., 1982). The initial task of children is simply to discriminate TV advertisements from the program (Calvert, 2003), a discrimination which Kunkel and Wilcox (2001) say takes place at four- or five-years of age. As Gunter et al. (2005) identified, children may only have the ability to recognise advertisements solely on these bases yet being able to recognise ads purely on these superficial features reveals very little about their understanding (Moses & Baldwin, 2005).

However, Oates et al. (2002) recognised that there is sometimes confusion between children's ability to make a distinction between the programmes they are watching and the advertisements contained within them – a conclusion also supported by Butter et al. (1981) who reported that many children cannot explain the differences between the two. Findings which suggest that children possess a general ability to recognise TV advertisements at the age of five- or six-years have also been challenged by research that shows ads in a different domain (web adverts) are not recognised until much later (Ali, Blades, Oates, & Blumberg, 2009). Additionally, Owen, Lewis, Auty, and Buijzen (2013) found that children aged sevento 10-years had more difficulty in recognising advertising and its persuasive intent when it

was shown in an embedded format compared to TV advertisements. Inconsistencies in the results of previous research highlights the need for a more detailed exploration of children's understanding.

Whilst there is much ambiguity surrounding what children understand in relation to advertising, literature concerning children's developing cognitive abilities and the growing awareness of the psychological state of others generally agrees that understanding of TV programming appears to grow steadily in middle childhood, and continues through adolescence (Clarke, 2010). Livingstone and Helsper (2006) stated that throughout childhood children develop a critical understanding of advertising, even to the extent where, by the age of 12-years, they can start to become sceptical of it. This idea of scepticism is addressed at length in section 1.3. Some researchers argue that young children, up to age seven- or eight-years, ask for items they have seen advertised because they believe that they are being informed of the best products to choose; they believe advertisements contain accurate information (Liebert & Sprafkin, 1988), which could suggest that children of this age have a lack of scepticism.

Shaffer (2005, cited by Clarke, 2010) acknowledged that between the ages of nineand 11-years, most children begin to understand that the intention of advertisements is to persuade, with 13- to 14-year-olds having developed a healthy scepticism about what advertisements claim about their products. Lawler and Prothero (2003) also found understanding in eight- to nine-year olds, with children of this age demonstrating their ability to differentiate between advertising and programming by recognising the relative difference in length, content and the overall difference in genre. Lawler and Prothero stated that the findings in their study illustrated a fairly sophisticated understanding with awareness on the part of the nine-year-old children regarding advertising's persuasive role, as the children were in agreement that advertising has a persuasive nature in terms of encouraging people "to buy stuff" (2003: 420). When investigating children's understanding of persuasive intent inherent to television advertising, Andronikidis and Lambrianidou (2010) found contrasting results to Lawler and Prothero, finding that whilst most of the 10- to 11-year-olds understood the persuasive role of advertising, only a few of the eight- to nine-year-olds and none of the children younger than seven-years had the same understanding. Similarly, Oates et al. (2002) found that only a quarter of eight-year-olds and a third of 10-year-olds referred to the persuasive nature of advertising in their studies, with Derbaix and Percheux (2003) providing evidence to suggest that even children as old as 10-years may not recognise 'persuasive intent'. Reporting on a range of studies (e.g. Ward, Wackman, & Wartella, 1977), Bjurstrom (1994) concluded that we can only be certain that children have developed a deeper understanding of the purpose of advertising when they reach 12-years of age.

It is apparent that there is much ambiguity in the literature concerning when children have knowledge of persuasive intent and some of this ambiguity could be reflective of the methods used. Some studies used non-verbal test methods, simply asking children to choose between pictures of someone buying a product or someone watching TV. It is questionable whether image selection is an appropriate measurement for advertising research, with Donohue and Meyer (1984) suggesting that the selection of an image alone should not be

interpreted as understanding of advertising. Furthermore, Lapierre (2013) stated that there are likely to be unmeasured variables contributing to the relationship which are being ignored. For example, researchers have pointed out that even being armed with the knowledge that advertisers are trying to persuade, children do not become better prepared to resist advertising messages. In her work into children's knowledge of persuasive intent in food marketing campaigns, Chernin (2007) found that even children as young as five-years-old possessed knowledge of persuasive intent, yet these children were just as persuaded by food advertisements as children who lacked this knowledge. This current, on-going ambiguity highlights the need for more detailed research, although Kunkel's (2001) contribution is important here. Kunkel argued convincingly that much of the debate in this area is caused by measurement error; many researchers appear to treat understanding of 'selling intent' as being equivalent to understanding 'persuasive intent' with the result that children's abilities may be overestimated. Kunkel (2001) demonstrated just how sophisticated adult-like understanding of persuasion knowledge needs to be and suggested that, fundamentally, most studies do not measure it. Still, adults are considered to possess a range of advertisingrelevant knowledge and skills that researchers can use as comparative benchmark against which to assess children's understanding (Friestad & Wright, 1994; Moses & Baldwin, 2005; Wright, Friestad, & Boush, 2005).

Some campaigns may opt for informing the consumer by including "informative intentions" where the advertiser informs of availability of the product, its important features, and where it can be purchased (Moses & Baldwin, 2005: 187). Recognition of 'informative intent' requires acknowledgment from individuals that people differ in their knowledge so, whilst some may be ignorant to a particular advertising claim, others may be knowledgeable of the information it is providing (Moses & Baldwin, 2005). 'Promotional intent', on the other hand, requires recognition that one's own views and interests may differ from that of the advertising company, an ability that Moses and Baldwin (2005) acknowledged requires a sophisticated understanding that advertising messages may be subject to bias, and information surrounding it may not always be accurate. Considering the literature surrounding executive functioning (e.g. Anderson, 2002; Diamond, 2002) Moses and Baldwin concluded that immaturities in executive functioning skills of children in middle childhood or younger, limit the extent to which they can make use of these concepts. Executive function is said to follow a prolonged developmental course (Diamond, 2002, cited in Moses & Baldwin, 2005) that continues throughout adolescence and into early adulthood (Anderson, 2002). This is discussed further in section 1.2.

Evidently this is a research area in which there are many contradictory findings. Furthermore, in terms of new advertising techniques this is, the environment in which children are exposed to advertising will continue to be fast-moving. The ongoing debate in this area provides a gap for examination, as questions remain as to when children truly develop the ability to resist any negative effects of advertisements and doubts remain as to whether targeting children with advertising represents fair practice (Linn, 2004).

1.1.3 Advertising literacy I

The term advertising literacy has been used to describe the set of knowledge and skills individuals possess which allow them to guard against any unwanted effects of advertising (Boush, Friestad, & Rose, 1994). Research has tended to focus upon understanding the various facets of advertising literacy and identifying how they develop in children and adolescents (e.g. Kunkel, 2010; Rozendaal, Buijzen, & Valkenburg, 2011). Typically, researchers have proposed several key features of advertising literacy including; the ability to recognise advertisements, being aware of the source of advertisements, and understanding both the selling intent and persuasive intent behind advertising. Opree and Rozendaal (2015) have referred to this knowledge set as 'conceptual advertising literacy' (i.e. knowledge about how advertising works).

There is research evidence which suggests that advertising literacy can be of benefit. Austin and Johnson (1997) found that when eight-year-old children were given media literacy training whilst watching a video in which ads were present, they were more likely to understand the intention of the ads. Furthermore, in a delayed follow up study three months later, children who had been given the media literacy training also held more realistic beliefs about whether people in ads are representative of real people. These authors concluded that describing advertising techniques to children, whilst ads are being presented, enabled them to understand the intentions of the advert. Similarly, Roberts, Christenson, Gibson, Mooser, & Goldberg (1980) found that children aged six- to 11-years were more sceptical about advertising after they had been exposed to similar description techniques upon ad presentation.

Research by van Reijmersdal, Rozendaal, Smink, van Noort, and Buijzen (2017) suggested that children's processing of advertising seems to be less elaborate than that of adults and, in their recent research into advertising literacy, Hudders and Cauberghe (2018) provided support for this assertion. Hudders and Cauberghe found that children aged 10- to 11-years had higher levels of advertising literacy than younger children and that they were able to use this knowledge to detect commercial intent in the ads as well as the source of brand placement. Rozendaal, Lapierre, van Reijmersdal, and Buijzen (2011) argued that to utilise advertising literacy when considering advertisements requires individuals to "stop-and-think" – a process which is less likely to be seen in young children due to their underdeveloped cognitive functioning. It is suggested that younger children are unable to shift their attention away from the ad to consider the persuasive intent and apply defensive strategies, therefore concurring with previous literature which suggested that advertising literacy may not be as beneficial to children as some first considered.

Until recently, research into advertising literacy has tended to focus on the immediate effect on children's responses to advertising, with little consideration being given as to whether such effects occur at a later time point. De Jans, Hudders and Cauberghe (2017) included advertising literacy training in their experimental study to explore the delayed effects of such training. Their study with seven- to eight-year-olds and 10- to 11-year-olds found that for both age groups advertising literacy training was effective on both immediate testing and delayed testing of the effects of product placement. An important finding of this

research, however, was that when liking for the ad was low, high advertising literacy was related to fewer purchase requests for the product. Yet the same effect was not present when liking for the ad was high. If we consider ad liking to be an affective response, the findings of De Jans et al. concerning ad liking could suggest that a positive affective response to ads may be related to the judgments children and young adults make about brands and products. One of the aims of this thesis includes examining the relationship between general liking of advertising and brand responses.

A fundamental problem with the main body of research into advertising literacy is the fact that it only draws upon findings based upon children's explicit judgments and preferences. In section 1.2.5 the implications of this in relation to psychological research on implicit cognitive processes is discussed. Because of the nature of modern advertising and the use of 'stealth' techniques (including celebrity endorsement), implicit processes are equally, if not more important to consider when examining children's understanding of advertising. It can therefore be concluded that, in terms of cognitive control and development, media literacy may have some benefit to protecting children's explicit judgements yet may only have some limited success in protecting children overall as processing may occur in a low-level implicit way (Büttner, Florak, & Serfas, 2014). As Livingstone and Helsper (2006) point out, advertising can influence implicit judgments just as much as explicit preferences, yet advertising literacy may not moderate the implicit effects.

1.2 Psychological perspectives on advertising to children

1.2.1 Piagetian theory and advertising

Whilst there is no univocal conceptualization in the literature, much of the developmental work investigating children's understanding of advertising has had its theoretical basis in Piaget's work. Piaget's theory explains the cognitive development of individuals, through infancy, childhood, adolescence and adulthood. According to Piaget (1932), as we get older we begin to construct ideas of the world around us and we learn that there may be discrepancies between what we thought we knew and reality. As we age, we learn how to adjust our thinking accordingly - in general, older children are better able to reflect upon their own thinking and the thoughts of others, and as such can think in a more abstract way. Piaget's theory of cognitive development has provided the basis for the majority of early research into children's understanding of advertising (Raju & Lonial, 1990). Piaget's approach suggests that as children get older and gain greater experience of their environment their cognitive abilities develop they are able to understand more about the nature of advertising (Pine & Veasey, 2003).

Piaget (1932) believed that very young children, in the preoperational stage of development, are thought to be egocentric, suggesting that younger children struggle to accept anyone's view but their own. Therefore, children in the preoperational stage have cognitive skills so limited that they have only a partial understanding of advertising (Johnson & Young, 2003), and this reflects in their poor ability to grasp the perspective of advertisers (Moses & Baldwin, 2005). In relation to the literature on persuasive intent discussed earlier,

Young (2003) applied research findings to the Piagetian theory of development. Generally, research (e.g. Gunter et al., 2005; Levin et al 1982) to suggest that young children believe advertisements are created solely to generate amusement. This is explained by Piaget as an interpretation of reality through their own senses – in short, children are unable to understand beyond their own senses (Young, 2003). For Piaget, this is a feature of egocentrism, which goes some way into explaining why children provide explanations such as "they're shorter or funnier" when explaining the difference between programmes and advertisements.

According to Piaget (1932), children in early childhood are not good at picking up ambiguities and they are less able to deal with complexity. During the concrete operational period (approximately seven- to 11-years of age) children's thinking develops to a point whereby they are able to recognise that multiple perspectives are possible, although Moses and Baldwin (2005) concluded that their thinking can only be applied to certain contexts and they have limited ability to reason about hypothetical contexts. Children aged seven- to 11years, therefore, are still considered to be somewhat cognitively restricted. Consequently, researchers have tended to assume it is likely that it is not until children reach the formal operational period in adolescence (12-years and onwards) that they are fully able to grasp that there are complexities and ambiguities in messages displayed through media. Piaget explains that in general, older children are better able to reflect upon their own thinking and the thoughts of others, and as such can think in a more abstract way. Therefore, a child would only be capable of understanding the persuasive intent of advertising when this stage of development has been met (Johnson & Young, 2003). This corresponds with their ability to understand more about the purpose and intent of television advertising. Following Lawler and Prothero's (2003) viewpoint, the application of Piagetian theory would suggest that children in this age group are able to move beyond accepting advertising at face value and become more evaluative concerning advertising messages.

Extending upon the work of Piaget, John (1999) applied the Piagetian framework to propose three developmental stages in children's understanding of advertising. The first discussed is the perceptual stage (aged three- to seven-years), which suggested that children can only distinguish visual advertising features. As age progresses children are thought to become more analytical (seven- to 11-years) and begin to use manipulative methods to request products – an ability which John suggested demonstrates awareness of parental viewpoints differing from their own. Finally, around 11- to 16-years-of-age, children become reflective and often consider prices, branding and recommendations before purchasing products. John (1999) stated that even 14-year-olds are not responding like adults in terms of their advertising understanding, but how they are different is not explained. The studies reported throughout the current thesis included samples of 14-year-old children in an attempt to explore how 14-year-olds and adults may be different.

Piaget's work was also influential in the creation of Friedstad and Wright's (1994) Persuasion Knowledge Model (PKM). This model suggests that compared with older children and adults, younger children find it difficult to appreciate the information contained in advertising, and struggle to recognise that advertisers present information from the perspective of their clients in seeking to persuade the recipient and influence their behaviour.

According to this model, and again in line with Piagetian theory, it is likely that it is not until children reach adolescence (12-years and onwards) that children are fully able to understand persuasive intent inherent to advertising, and grasp that there are complexities and ambiguities in messages displayed through media. Both Piaget and the PKM explain that, in general, older children are better able to reflect upon their own thinking and the thoughts of others, and as such can think in a more abstract way. This corresponds with their ability to understand more about the purpose and intent of advertising.

The preoperational stage (age two- to seven-years) of Piaget's theory has been applied widely to advertising, with many recognising that the inability to understand different perspectives can appropriately be applied to how young children think about advertising — children of this age should not be able to understand that their own thoughts and the intentions of advertisers may be different (Lapierre, 2013; Lawlor & Prothero, 2003). However, beyond the preoperational stage, some now question how appropriate the Piagetian approach is to contributing to our understanding of how children interpret advertising (Moses & Baldwin, 2005). Researchers have since started to draw upon research conducted in the area of Theory of Mind to provide a clearer understanding of children's understanding.

1.2.2 Theory of Mind and advertising

Previous research has looked at explaining what children understand about advertising and when they have the necessary cognitive skills to buffer against advertising messages (Rozendaal, Lapierre, et al., 2011), but very few studies have looked at utilising developmental research to explore why children may respond differently to persuasive messages (Rozendaal, Lapierre, et al., 2011).

Building on the work of Piaget, Theory of Mind is an area of research concerned with how an understanding of the mental state of others develops - for example, understanding that other people may have a different mind-set to oneself. Generally, research has consistently shown that very young children have difficulty with recognising that their beliefs, desires and motivations may differ from those around them (Banerjee, 2000; Lapierre, 2013). Yet, as age develops, so too does this understanding, and there is considerable evidence that skill in perspective taking increases with age (Clark & Delia, 1976). There is only limited work which has applied a Theory of Mind perspective to explore children's understanding of advertising, but such findings offer valuable results which aid in informing the general literature concerning advertising understanding. McAlister and Cornwell (2009) used print advertisements to test whether preschool children's Theory of Mind development was linked with their persuasion knowledge of these ads, finding that children who performed better on Theory of Mind tasks were more likely to understand the advertising campaigns. In a later study, McAlister and Cornwell (2010) tested the effect of Theory of Mind on brand awareness. Here, understanding of persuasive intent was not measured, but the study found that children with more distinct Theory of Mind abilities were more likely to understand brand symbolism. However, as Lapierre (2013) pointed out, the children in this sample were only four-years of age and the researchers only tested whether children understood that the advertisements were linked to consuming the product, rather

than whether recognition of persuasion was understood. As discussed in section 1.1.2, recognition of persuasive intent is considered to be a more advanced aspect to comprehend and is thought to require a higher level of cognitive development. Research is lacking into the examination of Theory of Mind development and advertising understanding in older children, and therefore any assumptions must be applied with caution.

Research on children's development of Theory of Mind suggests that one of the first skills children develop is to understand false belief (Wimmer & Perner, 1983). One test which is used to examine false belief is the Smarties task – children are shown a Smarties box and asked what they believe to be in the box with the answer "Smarties" typically given. Children are then shown that the box actually contains crayons before being asked what they think the next child will believe is in the box. Five-year-old children who have developed an understanding of false belief (Gopnik & Astington, 1988) will answer "Smarties" but younger children who have not yet developed an understanding of false belief will incorrectly reply "crayons". Whilst alternative explanations have been proposed to explain this error, a common assumption is that younger children mistakenly believe that people have access to the same information as themselves, and they therefore assume that the next child to be asked will have the same information available as they have (Lapierre, 2013). In a meta-analysis of research into false belief tasks, Wellman, Cross, and Watson (2001) found that typically children develop the ability to understand that others can hold false beliefs about events in the world between the age of three- and five-years, although Bartsch and London (2000) found results consistent with the notion that use of belief information in a task of persuasion may develop relatively slowly. Lapierre (2013) argued that knowing that other people can have separate beliefs should represent a milestone in understanding persuasion contained within advertising, however he goes on to suggest that it is the development of second-order beliefs - understanding the belief of another person – which should help children with understanding persuasive messages in ads.

Understanding bias is considered to be key in understanding persuasive intent - considering someone's biases when trying to understand their actions develops much later than understanding first-order or second-order mental states (Banerjee, 2000), but once achieved should be beneficial for children's advertising understanding. Whilst children who have knowledge of second-order mental states can recognise that someone is trying to change their beliefs, a clear persuasive attempt is needed for them to recognise this (Lapierre, 2013). However, as discussed later in section 1.2.5, not all advertising campaigns have a clear persuasive message for children to recognise, which could be considered problematic. Consequently, Lapierre argued that only children who have an advanced understanding of mental states and how they predict other's behaviour should be able to interpret these messages. However, there could be a fairly abstract connection between an ad with no product information to thinking about advertisers manipulating us as consumers. The ability to recognise manipulation may require affect-based scepticism, which will be addressed in section 1.3.

Interestingly, Lapierre's (2013) own work found that Theory of Mind development only predicted children's understanding of advertiser's selling intent but did not predict

children's knowledge of persuasive intent, a finding which he attributes partly to the conceptual differences and complexity of constructs of 'selling intent' and 'persuasive intent'. This supports the findings of earlier work of Bartsch and London (2000) who found that children performed well on false-belief tasks but poorly on persuasion tasks. As Kunkel (2010) noted, it is likely that the development of knowledge of persuasive intent is likely to come much later than the understanding of selling intent and that the two types of understanding are not arrived at at the same time. However, it may also be that whilst the development of Theory of Mind is important in children's understanding of advertising, a more affective response may come into force when considering the effects of advertising campaigns. It may be that being aware of second order beliefs is not enough to deal with stealth ads. For example, targeting of our implicit cognitive processes may now be one tactic of advertising campaigns and, as such, recognising that someone is trying to change beliefs may not offer protection.

1.2.3 Explicit and implicit cognition

As already discussed, studies have attempted to understand what effects advertising has on children, although much of this research has focused on explicit knowledge. Explicit judgments refer to the thoughts and preferences which individuals are aware of having and which they are able to report, for example, when they know which brands they prefer (Lawler & Prothero, 2003). However, such studies fail to take into consideration the importance of implicit responses which also influence judgments (Donohue, Henke, & Donohue, 1980). Although the evidence regarding children's understanding of persuasive intent is mixed, some researchers have claimed that children are unable to recognise the 'persuasive intent' of advertising until they reach early adolescence (Lawlor & Prothero, 2003). However, this is based upon research which assess children's understanding on the basis of their explicit, conscious response – processes which require a high level of cognitive control (Büttner et al., 2014). Most of the work described in the previous sections is based upon the assumption (present in Piagetian theory and the Theory of Mind literature) that cognitive development involves an increasing ability to reason explicitly about information. Therefore, the development of the skills will inevitably lead to stronger abilities to cope with the effects of advertising.

This view has been challenged, however, by recent research in psychology and advertising which has shown how *implicit* attitudes influence behaviour. Bargh (2004) estimated that approximately 95% of our day-to-day decision making is governed by impulsive, rather than deliberate processes. With regards to advertisements, implicit knowledge concerns the effect that it has on the child without their realisation, which highlights the importance of considering and understanding the effects of such processes. For instance, one may have an implicit preference for a brand presented in an advertisement without explicitly knowing it (Nevid, 2010). For example, using popular celebrities to endorse brands may lead to positive feelings towards a celebrity (explicit) being (implicitly) associated with the brand, and further it may be the intent of advertisers to capitalise on these implicit associations. Importantly, Nairn and Fine (2008) argued that by overlooking the

study of implicit processes, researchers fail to grasp how persistent the effects of advertising truly are.

It is important to reflect on the difference between explicit and implicit judgments, as Nairn and Fine (2008) stated that adults have very little defence against the effects of implicitly acquired affective associations which strongly influence our lifestyles as consumers. Therefore, whilst adults and children over the age of 12-years tend to show understanding of the persuasive nature of advertisements in their explicit judgments and preferences, the implicit affects are likely to apply to both children and adults. This is the central issue – whilst we, as adults, might be able to protect ourselves in our explicit judgments, protecting against implicit affects could be far more difficult. This is, by default, also problematic for children. This is a view supported by Dijksterhuis, Smith, van Baaren, and Wigboldus (2005) who acknowledged that people often choose products unconsciously, with tactics surrounding persuasion often encouraging consumers to act mindlessly in response to ads that trigger automatic, subconscious responses to products and brands. Further support is provided by Ratliff, Swinkles, Klerx, and Nosek (2012) who studied how positive attitudes to a brand could transfer to both the explicit and implicit judgments of a second, unknown brand. In terms of implicit judgements, the positive attitudes towards the first brand transferred to the second brand, even when it was revealed that this brand actually had several negative attributes. Explicitly, however, people responded as expected to the second product which was disliked due to its apparent negative features. This offers a first glimpse into how individuals may have explicit and implicit responses to advertising which are different - an important aspect of this thesis which is discussed throughout.

Gibson (2008), in his research on mature brands, highlights the need for more research which uses implicit measures, claiming that the effects of evaluative conditioning would have been significantly underestimated in his own research findings had a measure of implicit responses not been included. Gawronski (2009) notes that the increased use of implicit measures is related to the expanded criticism of self-report methods and our inability to accurately observe our own inner thoughts. Gawronski and Bodenhausen (2006) proposed that indirect measures of testing provide an ability for the activation of associations in memory, which is one reason why implicit measures are more widely used in psychological research when assessing mental associations between concepts. Whilst there is a wide array of methods which have been used in past research, the most widely accepted methods include: the Implicit Association Test (IAT), the Go/No-Go task, and the evaluative priming task.

Implicit judgments are most commonly investigated through the use of the Implicit Association Test - a test based on the assumption that people respond more easily in a task when they rely on cognitive associations, compared to when they have to process conflicting links (Rudman, 2011). IATs work on the premise that when a cognitive association has been made, individuals will respond with greater accuracy and with greater speed. Using the example of flowers and insects, Rudman (2011) reported that the large majority of people find it much easier to associate flowers with pleasant words, and insects with unpleasant words. It is much harder for these associations to be reversed, and thus response times are

significantly slower for example, when flower / unpleasant and insect / pleasant are paired. Implicit attitudes are considered to manifest as judgments that are under the control of automatic responses, without awareness from the individual.

The IAT method has, however, undergone some criticism. Whilst the IAT is designed to measure strength of associations, Rothermund and Wentura (2004) suggested that it instead measures salience of attributes. The results of four experiments led the authors to conclude that the influence of associations could be eliminated by using non-words and neutral words in replace of the attributes of positive and negative words, and that the removal of these associations still led to faster responses for the recording of salient categories on to responses. In sum, it was assumed by these authors that salience attributes, rather than evaluative differences, form the basis for IAT effects (Rothermund & Wentura, 2004). In response to this claim however, Greenwald, Nosek, Banaji and Klauer (2005) offered a counterargument to the salience asymmetry interpretation that Rothermund and Wentura (2004) proposed, which stemmed from research which has shown that the IAT has high construct validity. In studies where groups were expected to respond differently (for example smokers versus non-smokers) IAT results consistently showed differences in the direction as would have been expected (Greenwald & Nosek, 2001).

Criticisms have also suggested that implicit bias is not strongly related to behaviour. Whilst there has been plenty of research that has used implicit tests to explore implicit attitudes and preferences, questions have been raised about what these implicit attitudes are, and what measures of implicit testing can actually tell us. For example, there is doubt as to whether implicit measures predict behaviour, and whether such measures add anything to behaviour that can be easily measured using explicit tests only (Gawronski & De Houwer, 2014). In research looking at phobias however, Teachman, Gregg and Woody (2001) found that implicit measures successfully predicted behaviours. They recruited participants with a high fear of snakes or spiders and presented them with four IAT tasks. During these tasks they were required to categorise words representing fear and anger, as well as images of snakes and spiders. Participants were also asked to self-report their fear. Based on the results of the IAT, 92% of respondents were categorised into their appropriate fear group that had been suggested based on their self-report assessments. Furthermore, the IAT responses demonstrated to be good predictors of behavioural approaches to snakes and spiders. In refute of the concerns with implicit measures, Banaji concludes that they can "offer a window into a mental world to which the conscious mind is not privy" (2001: 145).

Offering an evaluation of the IAT method, Gregg and Klymowsky (2013) stated that whilst the IAT does have drawbacks, the advantages and practical use of the method far outweigh these. Social desirability bias, self-enhancement bias and self-ignorance bias are all reported as reasons why participants may often engage in deception when providing explicit responses in psychological research, often with participants acting in a way not representative of their thoughts and attitudes. This has obvious repercussions for the validity of research and such biases have an effect on participants' responses (Gregg & Klymowsky, 2013). These biases are not present in implicit tasks.

Generally, research with adults that has used the IAT shows the test to have good reliability (Gawronski & De Houwer, 2014) and validity (McKeague, O'Driscoll, Hennessy & Heary, 2013), with McKeague et al. (2013) suggesting that sometimes explicit measures are outperformed by implicit measures where measuring behavioural responses is the main focus. However, a reported concern relating to the validity of the IAT is that some studies report associations between measures of implicit and explicit attitudes whilst others do not (McKeague et al., 2013). This criticism, however is a general criticism of implicit tests more widely and is argued by Gawronski (2009) to be due to measurement error, rather than any lack of correlation being interpreted as a lack of explaining the "unconscious". This argument is presented more thoroughly below, however, a meta-analysis conducted by Greenwald, Poehlman, Uhlmann and Banaji (2009) concluded that the IAT has predictive validity independent of the validity of explicit measures, which suggests that the IAT is a useful implicit test to use. McKeague et al. (2013) support this claim, arguing that individuals can attempt to control responses they are asked to self-report on explicit measures, which could go on to explain the absence of explicit-implicit correlations in some reported studies where participants may have tried to suppress explicit attitudes.

The lack of correlations often reported between the results from self-report methods and implicit measures can be expected in some studies. For example, in some of the very early work that used the IAT (Greenwald & Banaji, 1995), the results concerning stereotypes and prejudice provided an interesting insight into how explicit and implicit attitudes can differ, and formed the basis of the further exploration of implicit testing and what it can tell us. However, the lack of correlations between explicit and implicit responses can sometimes be problematic for psychological research and call into question the validity of implicit tests where explicit and implicit responses are expected to be aligned (Gawronski, 2009). Gawronski (2009) reported that the IAT is one of the few methods that has consistently shown reliability estimates that are deemed acceptable, with Greenwald and Nosek (2001) providing further evidence that the IAT has been shown to be sensitive to individual differences, with a number of studies reporting the internal consistency of test-retest reliability to be high.

Perkins, Forehand, Greenwald and Maison (2008) highlight that the IAT can be used to separate underlying processes that produce effects traditionally observed with explicit measures. Maison, Greenwald and Bruin (2001) explored areas where dissociations between explicit and implicit attitudes are expected to be different. Using high- and low-calorie products as an example, Maison et al. expected that young women would report high-calorie products as tasting good but being bad for their health, and when using explicit measures this hypothesis was supported. Implicit attitudes contrasted these findings, however, highlighting that young women had more positive attitudes toward low calorie products. Again, research of this nature highlights the successful use of the IAT method and gives credit for it being used as a method throughout the research presented in this thesis.

The Go/No-Go task (Nosek & Banaji, 2001) follows a similar premise to the IAT method in the sense that it measures strength of associations. However, instead of participants categorising between two concepts, the Go/No-Go task uses an assessment of

absolute associations with a single concept (Gawronski, 2009). The Go/No-Go task requires the same response to items that belong to a category (e.g. insects) and an evaluative attribute (e.g. good), and no response when items do not belong to the target category and attribute (Dimofte, 2010). The Go/No-Go task also has many benefits, one being that the task easily assesses the ability of a participant to learn to respond to cues. However, Yechiam et al. (2006) report that this test can also be problematic, for example, participants can ignore response cues, or may have slow learning rates, which can affect the results of the research.

Evaluative priming tests are also used to measure implicit attitudes and have been used in a wide range of studies investigating a plethora of research interests. Research using evaluative priming has been conducted in studies investigating, but not limited to, depression, emotion, food preferences, social groups (for example, ingroups and outgroups), prejudice and stereotypes (Herring et al., 2013). In evaluative priming tasks, primes (attitude objects) are followed by targets (evaluative words) and the strength of evaluative association is measured by the speed of target judgment made by the participant (Banaji, 2001). The faster the prime leads to responses to positive words is assumed to be associated with implicit preference (Gawronski, 2009). Thus, it is assumed within all research using priming tasks that response times will be quicker when an adjective has the same bearing as the associated prime (McKeague et al., 2013). Banaji (2001) highlights that both the IAT and evaluative priming methods share basic assumptions, for example, they both use response times to measure the strength of associations, and both use this to explain automatic attitude. However, as Gawronski points out, the extent to which the categories are assessed differs. The IAT requires participants to practice categorizing the stimuli into its correct category, something which is not required during evaluative priming tasks. Therefore, different associations are being assessed which, by its very nature, could mean that results may differ (Gawronski, 2009).

Having reviewed the literature on the use of implicit measures, Gawronski, LeBel, and Peters (2007) have also offered a review concerning what implicit measures can tell us. Gawronski et al. suggest that there is no evidence that indirect measures are "unconscious", with Gawronski (2009) indicating that there is evidence to the contrary. As mentioned previously, reporting that there are often low correlations between implicit measures and traditional self-reports, Gawronski argues that this could be due to measurement error rather than assumptions that implicit tests are measuring the "unconscious". Instead, Gawronski et al. propose that research should label implicit processes as 'associational activation' (automatic) and explicit processes as 'propositional validation' (reflective). This sits in line with the APE model of Gawronski and Bodenhausen (2011) which is discussed in section 1.2.4.

Given the overwhelming research conducted by Greenwald and colleagues into implicit measures and the use of the IAT, and published empirical studies providing evidence for the validity of the IAT (for example, see Gawronski & Bodenhausen, 2006; Gawronski & Bodenhausen, 2011; Gawronski, LeBel & Peters, 2007; Gawronski & De Houwer, 2014; and Greenwald & Nosek, 2001) it was considered appropriate for the IAT to be used in the work discussed throughout this thesis. Gawronski and De Houwer (2014) acknowledged that

choosing the "right" procedure for implementing in a research study can be perplexing, however they recognise that each implicit measure does tend to lend itself to a particular study interest. The IAT, for example, allows for flexible comparison between pairs of attributes (which is a main focus for the studies reported in this thesis), and is reported in many papers to show a good level of internal validity (Greenwald & Nosek, 2001). Kim and Greenwald (1998, cited in Greenwald & Nosek, 2001) found that participants were unable to correctly respond to an IAT measure when asked to show a lack of automatic preference for white faces as opposed to black. This research, amongst others, highlights that implicit responses are difficult to suppress on the IAT, showing it to be a valid measure of implicit attitudes. A further strength of the IAT method is that the overall length of the task can be adapted to suit the targeted age group (explored in more detail in section 2.4), with increasingly more research being conducted with some very young children.

1.2.4 Dual processing models: research with adults

The aim of persuasive intentions within advertisements is to attempt to change the conscious thoughts or behaviours (or both) of consumers directly, although a secondary aim is to influence their beliefs and desirability of a product indirectly (Moses & Baldwin, 2005). Dual process models of persuasion suggest that attitude change may occur through two basic routes – implicit or explicit (Xu, 2017), and therefore it is important to consider such models in relation to how advertising works.

The Elaboration Likelihood Model (Petty & Cacioppo, 1986) predicts that motivation and ability influence the likelihood of message elaboration, and that increased elaboration enhances persuasion when the message is strong. In advertising, a message is considered to be strong if it elicits the positive brand cognitions desired by the message communicator (Petty & Cacioppo, 1986). Petty and Cacioppo (1986) cite how mass communication situations can be conceptualised as evoking one of two routes to attitude change – the central route and the peripheral route. The central route involves persuasion through "message elaboration", with the message recipient scrutinizing the content of arguments and then changing their attitude on the basis of its merits. The peripheral route involves attitude change based on cues irrelevant to the quality of the argument. This model, as adapted to advertising messages, is described in Figure 1.1.

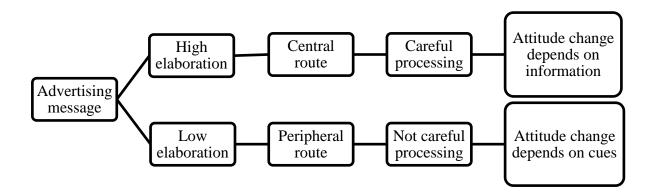


Figure 1.1 A dual-processing model of advertising based on Petty and Cacioppo's (1986) Elaboration Likelihood Model.

According to the ELM, careful conscious processing of a strong and convincing message can lead to persuasion via the central route. It appears plausible, therefore, that the impact of advertisements on brand evaluations may be sensitive to the relation between the cognitive resources required to process the message, and those made available for processing. Under weak-message argument conditions, thoughts may be directed toward elements of the message other than those intended by the message communicator. Thus, increased elaboration will enhance persuasion when the message is strong and diminish persuasion when the message is weak, but only within a certain range of processing motivation. In short, the ELM predicts that a strong message processed with high elaboration leads to positive persuasion, whilst a weak message processed under conditions of low elaboration leads to a more negative response (Petty & Cacioppo, 1986).

According to Coulter and Punj (2004) the five types of responses most often studied in the literature concerning the effects of advertising include affective responses to the ad, ad cognitions, attitude toward the ad, brand cognitions, and purchase intention - constructs which are all incorporated in the Dual Mediation Model (DMM), which has been well supported within the advertising literature. The DMM offers support for the theoretical model of Petty and Cacioppo (1988) and hypothesizes interrelationships amongst advertisement and brand constructs (Karson & Fisher, 2005). This model draws upon the likelihood of generating thoughts in response to a particular stimulus (Coulter & Punj, 2004). When exposed to an advertisement, consumer's brand attitudes can be influenced by many different factors – for example, both beliefs relating to the brand and attitudes towards the presented ad can be important (Yoon, Laczniak, Muehling & Reece, 1995). Yoon et al. (1995) suggested that the DMM has provided clearer understanding of advertising developments, as it offers both theoretical and empirical support for the idea that purchase intentions can be mediated by ad-induced brand attitudes. For example, offering support for the ELM (Petty & Cacioppo, 1986), research which has used the DMM to investigate advertising message

involvement has shown that the relationships proposed by the DMM can be altered depending on whether the consumer is engaged with the ad with a high or low level of involvement.

Relating to the ELM of Petty and Cacioppo (1986), the DMM fits well with, and offers support for this model. As with the ELM, this model suggests that when elaboration likelihood is high, viewers of a persuasive communication are prone to generate a relatively large number of advertisement and brand related thoughts, whilst engaging in more effortful processing of the displayed message's content. Conversely, when elaboration likelihood is low, few resources are made available for message processing, and brand attitudes are more likely to be formed by less effortful message processing. The DMM explains advertising in relation to both the central route, where brand cognition is linked to brand attitudes based on elaborations made by the consumer, and the peripheral route where information concerning brand attitudes and/or benefits do not influence brand attitudes. Instead, the ad cognitions links to attitudes about the ad, which in turn link to brand attitudes (Yoon et al., 1995). Both the central and peripheral routes, however, depend on an ability to apply cognitive resources and motivation to do so. This concept of elaboration and process motivation is something which requires further close inspection, particularly within the realms of cognitive resources. Buijzen, van Reijmersdal, and Owen (2010) argued that due to developmental cognitive immaturity (see discussion in section 1.2), children are more likely to process advertisements using lower levels of elaboration. Younger children may not have fully developed resources available which, according to Petty and Cacioppo's (1986) model (see Figure 1.1), means that attitude change will depend upon how they respond to superficial cues. Furthermore, as many ads do not contain any information to elaborate, this suggests that, even for adults, attitude change could also be reliant on their affective responses to superficial cues. If children are more likely to use lower levels of elaborations, as Buijzen et al. (2010) proposed, then brand attitudes are more likely to be affected by activated cues such as affective associations rather than strong messages. However, the DMM also explains how the central route and peripheral route of persuasion can be interrelated (Coulter & Punj, 2004) surmising that peripheral processing could also have an impact on the central route to persuasion if the persuasive message has been accepted.

López and Ruiz (2011), in their research into website effectiveness, suggested that whilst both the ELM and the DMM have received much empirical support in advertising research, the DMM has been considered to be the one that best explains the effectiveness of ads because it extends the central and peripheral route processing one step further by suggesting that attitude towards the ads influences brand cognitions in a positive way. However, as with the ELM, the DMM has largely been tested and explored with print ads and therefore may not explain consumer behaviour and attitudes to advertising media that consumers are more likely to be exposed to today.

It is important to note, however, that the ELM was originally created and tested in tasks looking at students' responses to written information (Petty & Cacioppo, 1986), and much of the research into the DMM also focuses on print advertisements, which solely assesses the conscious processing of information. Therefore, there may be some doubt

concerning how well tests such as these fit with how we experience advertising where we are not fully focusing on, or even trying to avoid, ads. Whilst the ELM has been useful in providing an understanding of elaboration and the importance surrounding the route of persuasion, given that ads are not typically attended to in a way that a written task would, it may not be the most useful framework to use when modelling the advertising approach. Karson and Fisher (2005) importantly distinguished the difference between ads presented in a format designed for the television or internet and ads presented in print, suggesting that the link between the attitude towards the website and intention to buy gives consumers more of an opportunity and motivation to process information more than when they are exposed to print ads.

It is important to consider that whilst advertisements are aimed at influencing consumers' behaviour, not all ads use a direct persuasive attempt. For an attitude to guide behaviour, it must have been activated in the first place. Fazio, Chen, McDonel, and Sherman (1982) found that attitudes can guide our behaviour and demonstrated that an attitude is an evaluation that becomes acted upon. In their research, Fazio et al. presented participants with prime/target pairs, with the primes being words referring to attitude objects, and the targets being positive and negative adjectives. Participants were required to indicate, as quickly as possible, whether each adjective was good or bad. As predicted, Fazio et al. demonstrated that participants responded quicker to negative adjectives after negative primes, and positive adjectives after positive primes – this is now more commonly known as the affective priming effect. Evaluative conditioning is a form of affective priming used in advertising, with some advertisements now more concerned with evaluative conditioning of an affect towards a brand or product than presenting a persuasive message. One reason for this could be that the content of a message could alert the consumer to the intentions of the advertiser, triggering feelings of manipulation which alerts the targeted audience to the advertiser's aims.

Holding conflicting evaluative responses to the same object is ordinary in everyday life, and therefore an important research question concerns the mental processes that underlie explicit and implicit evaluations and the causal factors that lead to changes in the two kinds of responses. The Associative–Propositional Evaluation (APE) model proposed by Gawronski and Bodenhausen (2011) explains dissociations between implicit and explicit evaluations in terms of their underlying mental processes. In their APE model, Gawronski and Bodenhausen distinguish between explicit and implicit processing by proposing that explicit evaluations result from propositional processing, whereas implicit evaluations are the outcome of associative processes. Many dual-processing models propose the storage of two very distinct memory representations, which Gawronski and Bodenhausen highlight to be a fundamental difference between such models and their proposed APE model in which information is to be assumed to be stored in the form of associations. Any association turns into a proposition if it is assigned a truth value (Gawronski & Bodenhausen, 2011). In support of other research which has examined models of advertising processing, Karson and Fisher (2005) also found that the premise of the DMM was the best fitting model to explain website effectiveness as intention to buy was more likely to occur when consumers were highly motivated to process the advertising claims. However, Karson and Fisher raised the

necessity for research to examine the impact of ad attitudes where affect intentions may be influenced by factors such as consumer trust or satisfaction. According to Gawronski and Bodenhausen, propositional processes are validated by conscious thought and logic, meaning that a high level of cognitive resource is needed. This is in opposition to associative processes which are based upon the activation of simple associations in memory which result in a positive or negative affective response ('gut reaction', p62) towards a target item. Much of advertising nowadays appears to involve a form of evaluative conditioning aimed at influencing associative affective responses rather than propositional reasoning. Therefore the APE model does seem a good place to start when thinking about modelling the cognitive processes underlying how we respond to advertising.

The APE model of Gawronski and Bodenhausen (2011) has received empirical support from research by Smith, De Houwer and Nosek (2012). Smith et al. (2012) examined whether implicit evaluations are altered by direct appeals in the same way as explicit evaluations. Participants were asked to imagine that they were searching online for information on laundry detergent and were then asked to read information about someone who had experience (either 'high' or 'low') of the product. Using both explicit and implicit measures, the findings of this research highlighted that when participants were encouraged to consider information about the source and credibility of the information given, implicit evaluations were affected. Smith et al. (2012) make reference to Gawronski and Bodenhausen's (2011) APE model in the discussion of their findings, acknowledging that the model allows for the possibility that positive associations could form on the basis of learned propositions. According to the APE model, implicit evaluations are assumed to reflect the associations that are activated in memory.

It seems evident that to push research forward, making links with the APE model (Gawronski & Bodenhausen, 2011) would be beneficial, utilising both propositional and associational processing. This would capture the distinction between cognitive and affective processing much better, as propositional processing involves consciously testing advertising information against advertising knowledge, and associational processing would enable examination of internal "gut feelings" towards ads. Distinguishing between these two types of processing may shed some further light into the importance of scepticism and, therefore, is a key aim of this thesis. Recognising an advertising campaign will normally trigger propositional processing of the ad, where logical validation using conceptual advertising knowledge is activated, especially for those with high conceptual knowledge (i.e. adults) and where attention to the advert is high.

It is also important to consider that some ad events are not recognised. Whilst this is more likely for young children, whose conceptual knowledge of advertising is low (see discussion in section 1.2), it could also occur in some circumstances in adults. Here, an individual's attitudinal or behavioural response may be determined by their affective response to the specific advertising campaign rather than advertising more widely. Where, for example, a specific ad automatically triggers a positive affective response, this is likely to be transferred onto the brand or product and may override any general negative feelings towards

ads (e.g. Forehand & Perkins, 2005, discussed in section 1.4). This is likely to be the aim of many advertising campaigns and in particular those using celebrity endorsements.

This calls into question the assumptions of the ELM and the DMM that effective persuasion only occurs via effortful conscious processing. Yoo (2008) argued that measuring the effectiveness of ads based on "traditional" cognitive models (that highlight the importance of encouraging the effortful processing of ad information), may be problematic as ads holding different formats may be undervalued in terms of their effectiveness. In his work with Internet web ads, Yoo found that even when little or no attention was given to presented web ads, implicit attitudes were subsequently stronger and more favourable towards the advertised brand. Similarly, Shapiro, Macinnis, and Heckler (1997) used a typical incidental exposure paradigm to show that even when attention is fixed on one task, incidental advertising exposure has an effect on later product brand judgments. In this study, a sample of young adults were asked to guide a cursor across text on a computer screen, believing the task to be concerned with how such activities interfere with reading articles. In fact, Shapiro et al. were interested in observing whether ads for products (e.g. a carrot) shown peripherally on screen would later show in a brand selection task. More participants in the experimental condition (who had target ads presented amongst the text on the screen) stated that they would consider purchasing the target products than those who were solely shown text for the cursor guiding task. Together, research such as this has shown that explicit, conscious memory and/or high levels of attention are not necessary for ads to be effective, providing even more support for dual-processing models which emphasise the influence of implicit processes.

Often, persuasive attempts are far subtler. For example, many advertising messages instead focus on peer popularity (Page & Brewster, 2009). In children's advertising in particular, many messages rely heavily on cues generating high levels of emotion to excite and intrigue younger viewers (Lapierre, 2013) with many ads depicting children enjoying playing with the advertised products (Buijzen & Valkenburg, 2002; Page & Brewster, 2009). Children's advertisements also frequently feature popular characters that children have a strong liking for, again to elicit some sort of emotional response. Heath (2012) has pointed out that emotional appeals are an important part of advertising campaigns. However, Heath argued that emotional processing occurs implicitly, prior to active, passive processing which may or may not subsequently occur. According to Greenwald and Banaji (1995) implicit cognitions are derived from past experiences which are unavailable for self-report or introspection but which can have a strong influence over our thoughts, feelings and behaviour. We may not be aware of our implicit attitudes but they are important in mediating how we feel and think about the world and how we respond to advertising. Many advertising techniques aimed at children focus upon generating a positive affective response to the advertised brand or product.

1.2.5 Dual processing models: research with children

Most of the advertising literature examining implicit preferences has tended to focus on adult samples, even though research suggests that children may rely more heavily on implicit

learning than adults, on the basis of explicit processing that takes up resources (Janacsek, Fiser, & Nemeth, 2012). Büttner et al. (2014) suggested that children have a limited explicit processing capacity when compared to adults, yet conditioning is able to successfully shape children's behaviour in an implicit way. Research by Gibson (2008) demonstrates that, even for young adults, implicit attitudes are difficult to overcome. For example, Gibson (2008) studied the effects of cognitive load (high or low) and evaluative conditioning on product choice in undergraduate students, measuring explicit and implicit attitudes to Coke or Pepsi that had previously been paired with positive or negative pictures. Whilst the conditioning procedure did not alter the explicit choices, implicit attitudes were altered by the conditioning procedure. Students who previously had no strong preference for either brand had changed implicit attitudes toward Coke or Pepsi, with a further study showing that brand choice was related with these changes in implicit attitudes. Gibson concluded that evaluative conditioning was successful in changing implicit attitudes.

One of the most basic processes of attitude formation is through mere exposure – perceiving a stimulus repeatedly generally makes that stimulus appear more positive (Zajonc, 1968). Auty and Lewis (2004) have explored mere exposure effects on advertising in children aged six- to 12-years – effects that are based on previous activations (Grimes & Kitchen, 2007) rather than associations or conditioning. Children were presented with an episode of Home Alone in which Pepsi either was or was not seen. In a later interview, those that had seen Pepsi in the film were more likely to choose Pepsi over Coke, suggesting that implicit preferences were key to influencing their choices. In a recent study looking at the effect of TV cooking and consumption on children's food choice behaviour, Ngqangashe et al., (2018) found that after being exposed to only one episode of a healthy eating television cooking show, children significantly tended to choose a piece of fruit over a cookie upon later testing. What is important to note here is that mere exposure effects do not require conscious awareness (Kunst-Wilson & Zajonc, 1980, cited in Gilbert et al., 1998). This research, alongside that of Janacsek et al. (2012), suggests that a dual-processing model for advertising preferences is also necessary when considering children's responses, something which is also considered throughout this thesis.

Büttner et al. (2014) devised a dual-step and dual-process model to a) explore advertising effects on children from ad exposure through to purchasing, b) acknowledge the role of implicit processes during both ad processing and purchasing, and c) provide an intervention designed to protect children from the negative effects of advertising, acknowledging that much advertising is usually processed implicitly. This model suggests that whilst implicit impulses can influence behaviour, they can be overwritten by explicit evaluations upon purchasing. One of the main criticisms Büttner et al. formulated is that many studies examine explicit and implicit preferences at time of testing, rather than following through to time of consumption. This is problematic since many ad campaigns are seen ahead of shopping trips or times of purchase and it could be that attitudes and preferences alter during this gap. Furthermore, using the classic 'marshmallow test' of self-control (see Mischel & Ebbesen, 1970) Büttner et al. noted that success in this task is dependent on experimental conditions, and this could suggest that testing children

experimentally may not accurately represent the purchasing intentions at times of consumption.

Büttner et al. (2014) concluded that a dual-processing approach is necessary in explaining children's advertising behaviours, with a focus on reducing implicit preferences the key to protecting children from being manipulated by ads. Whilst children can be taught advertising literacy skills (see section 1.3) to enhance their understanding of persuasion knowledge and self-control, these measures may not be enough to protect them from the implicit influence on purchasing behaviour. Instead, these authors suggested that strengthening children's implicit self-regulatory capabilities is central to protecting children from implicit impulses. Through the setting of parental goals, observing parent's behaviour and narrowing their attention, Büttner et al. claimed that children's self-control competency may provide beneficial defence against the negative effects of advertising. However, this research does not consider the effect of emotional responses created by ads (e.g. see Heath, 2012 - discussed earlier in section 1.2.4) which may override the development of self-control processes and regulation and thus reduce the effects of implicit protection.

1.3 Advertising literacy II: scepticism about advertising

Modern day advertising takes many different forms – including webpages, advergames and other formats which are subtler and less intrusive than traditional advertising formats. An important skill involved in advertising literacy is the ability to recognise an advertising campaign. Whilst some ads aim to present clear information about the brand, others make an emotional appeal aimed at generating positive affective response which is then transferred onto the brand or product. Furthermore, some forms of advertising are embedded into other material such as advergames, and websites, which can generate a positive affective response which can transfer onto the associated product or brand (see Hudders et al., 2017).

Traditionally, there has been consensus in the literature that adult-like conceptual advertising literacy is usually achieved by the age of around 12-years. However, recent research has suggested that understanding of advertising that is embedded within nonadvertising content (e.g. advergames, web advertising) may occur later than for more distinct forms of advertising such as TV ads (Ali et al., 2009; Nairn & Fine, 2008). As Rozendaal, Lapierre et al. (2011) suggested, many ads which are aimed at a child audience are designed to be processed in a low-effort way, again calling into question the relevance of media literacy training and conceptual advertising knowledge as a measure to protect children from advertisers' negative intentions. Therefore, the persuasive intent inherent to advertising campaigns can often go unnoticed. Much of advertising aimed at children does not contain an overt message at all, aiming instead to accumulate positive feelings in the child towards the brand or product using evaluative conditioning. This makes it difficult for young children, to offer a defence to the ad. Hudders et al. (2017) proposed that not only do children have limited knowledge of advertising and its intent (which they term dispositional literacy) but they also have difficulty applying such knowledge (situational advertising literacy). Chu, Blades, and Herbert (2014) have also argued that whilst previous research has shown that

children express some scepticism towards advertisements, research has not always distinguished between different aspects of scepticism, with Koslow (2001) arguing that research often conflates different types of scepticism by incorrectly reporting 'scepticism' as a general phenomenon.

Rozendaal, Buijs and van Reijmersdal (2016) investigated whether defence mechanisms against television ads could be triggered in children aged eight- to 10-years when forewarning of the advertiser's intent is given. Two different forewarnings were tested: one for *commercial intent*: e.g. "Now it is time for the commercials, but pay attention: commercials want you to like and buy their products" and one for manipulative intent: e.g. "Now it is time for the commercials, but pay attention: commercials are not always fair, sometimes they tell things that are untrue" (pg. 4). In order to test the effects of forewarning children during exposure to an advertisement, Rozendaal, Buijs et al. (2016) created a short video that included a segment of a popular children's programme and an advertisement break which contained three adverts: one experimental advert for Nutella, and two filler ads. Before the advertisement break children were presented with a forewarning (as discussed above), and during the break they were prompted to remind them of this forewarning. After watching the stimuli video, they completed an online questionnaire which measured their frequency of watching television, attitude towards the channel that broadcast the television programme shown in the experiment, desire for the advertised product, advertising literacy (conceptual and attitudinal), and familiarity of Nutella.

However, this research is open to some criticism. Whilst findings from the research of Rozendaal, Buijs et al. (2016) shows that forewarning of advertising content is beneficial to children, it is not clear whether this forewarning extends beyond immediate testing or in other contexts. This research was conducted during only one single time period during a day at school, and therefore it cannot be inferred that the effects of forewarning are longstanding. It is plausible to assume that the effects of forewarning could wear off, and so longitudinal research which tests for brand liking at a later time point would be beneficial. This is especially true considering products such as Nutella are likely to only be seen when shopping in supermarkets, and therefore there is an assumed link between responses to advertising and purchase behaviour. It would be interesting to see the impact that forewarning has on later shopping exposure. Additionally, this study did not measure actual consumption behaviour, but rather asked children "will you ask your parents to buy Nutella spread for you?". Whilst this was intentional due to the fact that the school did not allow unhealthy foods to be brought into school, it cannot be assumed that purchase intentions and purchase behaviours necessarily match. Future work may benefit from asking children what brands they would purchase, or give them tokens to purchase products, so that the effects of forewarnings could be more accurately examined, and conclusions could be more grounded within the theory. Following from this, Rozendaal, Buijs et al. (2016) highlight their concerns with only testing children in a school setting, and question whether lower elaborations levels may be seen at home, compared to the school environment.

The research by Rozendaal, Buijs et al. (2016) does, however, highlight some important findings and implications, and the study contributes to our understanding of the

role of forewarning children of the intent behind advertisements. The method employed represented a format in which children aged eight- to 12-years would usually be exposed to products being advertised, and the scales used to measure advertising literacy showed good reliability. Generally, a warning about advertiser's commercial intent activated advertising literacy, and raised ability to resist the persuasive message. However, informing of commercial intent only informs about an intention to sell, and does not necessarily indicate that the advertising message is intended to manipulate or be deceptive. Rozendaal, Buijs et al. highlight that scepticism to advertising is important in aiding resistance in children, yet existing educational programmes focus solely on increasing children's knowledge of advertising, which their results show may not provide enough of a defence in reducing their product desire. This is where, according to Rozendaal, Buijs et al. (2016), two different strands of advertising literacy may become important: conceptual advertising literacy and attitudinal advertising literacy.

Conceptual advertising literacy is an understanding of selling and persuasive intent associated with understanding of commercial intent and is seen as a "cognition-based defence mechanism". Attitudinal advertising literacy, on the other hand, is split into: scepticism towards ads (i.e. tendency to disbelieve advertising); and dislike of ads (i.e. negative attitude to advertising) and is seen as an "affective defence mechanism" which may be required to understand the manipulative intent of ads (Rozendaal, Buijs et al., 2016). The importance of conceptual understanding of advertising has been explained by Rozendaal, Opree et al. (2016) who have argued that 'attitudinal advertising literacy' may be more relevant in determining how individuals respond to advertising. According to Rozendaal, Opree et al., attitudinal advertising literacy consists of two components: general scepticism about advertising and general affective response to advertising. Scepticism refers to the extent to which an individual accepts the accuracy and believability of advertising claims, with lower trust in the accuracy of advertising being predictive of a greater resistance to unwanted advertising effects.

In their study, Rozendaal, Buijs et al. (2016) predicted that warning about manipulative intent would arouse children to the fact that they were being manipulated – a feeling which tends to be unpleasant and considered unfair by the individuals being targeted. Consequently, attitudinal advertising literacy would be activated and trigger negative and sceptical feelings towards ads. Many developmental theories (see review in section 1.2) suggest that due to underdeveloped cognitive abilities, children's advertising knowledge is somewhat limited and therefore warning would be needed for this activation to occur. On this basis, it was therefore expected that forewarning of advertising's manipulative intent would reduce children's advertised product desire by activating the affective defence mechanism known as attitudinal advertising literacy. This is what they found. Although conceptual advertising literacy was not increased by a warning of manipulative intent, an increase in attitudinal advertising literacy (specifically scepticism) reduced product desire (Rozendaal, Buijs et al., 2016). The authors concluded that this supports work such as Buijzen et al. (2010) which suggested that children process advertising under low cognitive elaboration, and "implies that children's responses to an advertising message will be primarily based on affect instead of rational analysis" (Rozendaal, Buijs et al., 2016: 9). It is important to note,

however, that conceptual advertising literacy was only assessed using two questions: one which measured selling intent, and one which measured persuasive intent. The brevity of this scale could offer an explanation as to why conceptual advertising literacy was not increased.

Research with adults (Obermiller & Spangenberg, 1998; Obermiller, Spangenberg, & MacLachen, 2005), has provided some evidence that higher *accuracy-based scepticism* is related to less positive responses to advertising amongst adults, particularly for ads making informational appeals (i.e. where information is provided about the product). Consumers' general affective response to advertising may be linked to *affect-based scepticism* which refers to the extent to which an individual holds a general negative orientation towards advertising with higher negative orientation also predicting greater resistance to the influence of ads. Previous research has suggested that an individual's affective response to a specific advertising event can influence brand attitudes and purchase intention (Batra & Ray, 1986). Given the nature of contemporary advertising, much of which provides little or no product or brand information, it seems reasonable to suggest that general affect-based scepticism plays an important role in filtering its effects. There is currently no research which has examined how accuracy-based and affect-based scepticism are related to explicit *and* implicit attitudes to brands and brand choice. This will be explored in the work reported throughout this thesis.

1.4 Celebrity advertising

McCracken (1989) defined a celebrity endorser as "any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement" (p. 310). In 2010, it was estimated that advertisements using celebrities as endorsers accounted for one-sixth of all global advertising (Mishra, 2015; Shimp, 2010), with Boeing and Marcon (2013) estimating that celebrity endorsement in advertising continues to rise, even though there is often a high cost associated.

Rozendaal, Buijzen et al. (2011) conducted research into children's understanding of advertisers' intentions by asking them to identify the intended effects of different tactics that advertisers choose to employ. Rozendaal, Buijzen et al. suggested that the age at which children reach an adult level of understanding of advertising varies by tactic and generally, celebrity endorsement is one of the first tactics understood by eight-year-olds. Based on this finding, it is not surprising that Hudders, Cauberghe, and Panic (2015) viewed celebrity endorsement as a tactic to which children are not vulnerable. If the tactic of celebrity endorsement is the easier tactic to understand, then it could be that children, like adults, can defend themselves against the intended manipulation of the celebrity paired brands. These findings offer partial support for the work of Livingstone and Helsper (2006) who claimed that different processes of persuasion operate at different ages, dependent on levels of media literacy. However, according to these authors, although younger children do have some advertising literacy, this is generally at a lower level than their older counterparts. Therefore, younger children would be more inclined to be persuaded by advertising containing celebrities, whereas older children are more likely to be persuaded more by ads that contain high quality arguments (Livingstone & Helsper, 2006).

There are several reasons why many advertisers choose to use celebrity endorsers within their advertisements and there are thought to be many benefits of using this strategy for the advertisers who use them. Erdogan (1999) reported that celebrities can impact positively on attitude towards brands, purchase intentions, and ad believability. Furthermore, celebrities can help advertisements to "stand out" from competitors (Sherman, 1985, cited in Erdogan, Baker, & Tagg, 2001), which leads companies to employ celebrity endorsers in an attempt to maximise profit (Erdogan et al., 2001). Despite Mathur, Mathur, and Rangan (1997) stating that there is no doubt about the positive impact celebrity endorsement has on financial returns for the company, there is, however, much debate surrounding the ability of celebrities to increase actual purchase behaviour. This leads to an important question concerning how the celebrity effect in advertising actually works.

Research suggests that we, as consumers, can be persuaded by advertising if a celebrity is seen to endorse the product (Cialdini, 2001). In terms of the Elaboration Likelihood Model (ELM), Lee and Koo (2016) stated that celebrity endorsement has traditionally been perceived as a peripheral cue. Petty and Cacioppo (1998) predicted that motivation and ability influence the likelihood of message elaboration, and that increased elaboration enhances persuasion when the message is strong, and weakening persuasion when elaboration is weak. Relating to this model, Lee and Koo's research would suggest that using celebrity endorsers could weaken persuasion.

In a recent review of research on celebrity endorsement, Bergkvist and Zhou (2016) noted that although there has been a large amount of research carried out to look at the effects of celebrity endorsement, for example on brand attitudes, purchase intentions and brand evaluations, surprisingly few studies have looked at the underlying psychological mechanisms involved. There seems to be consensus in the literature, however, that a key process involved is evaluative conditioning. As described earlier in section 1.2.4, evaluative conditioning is a form of 'low effort' cognitive processing through which responses to one stimulus come to be associated with a target stimulus following pairing of the two stimuli (Fennis & Stroebe, 2015). Till and Shimp (1998) described how, in using celebrity endorsers, it is expected that consumers' positive feelings toward a celebrity will transfer automatically to the endorsed brand through a process that has been called 'affect infusion' (Forehand & Perkins, 2005) and research has shown that repeated pairing of celebrities with brands can increase brand liking (Till, Stanley, & Priluck, 2008). An important feature of this process is that its effects can be seen under conditions involving little cognitive effort.

Research has suggested that using a celebrity is effective in an advertisement under low product involvement conditions via the peripheral route (Choi, Lee, & Kim, 2005), especially when a celebrity's credibility is compared to a non-celebrity with regards to brands being endorsed (La Ferle & Choi, 2005). In terms of the ELM, celebrity endorsement has traditionally been perceived as a peripheral cue (Lee & Koo, 2016) and research has been conducted into the influence of celebrities under different product involvement conditions. For example, findings have shown that endorser credibility influences both attitude towards the brand, and purchase intention (Goldsmith, Lafferty, & Newell, 2000) when a celebrity is considered to be a credible endorser for the brand being endorsed (La Ferle & Choi, 2005) or

during times when the celebrity 'eclipses' the brand (Ilicic and Webster, 2004) and the celebrity has a higher level of involvement in the ad than the product itself (Choi, Lee, & Kim, 2005). With reference to the ELM, Hung (2014) proposed that when attention is paid to the celebrity then attitude change is likely to occur.

One reason why celebrity endorsement has been seen to operate best under conditions of low involvement could be that a risk to its effectiveness occurs where the targeted audience is encouraged to consciously reflect upon the intentions behind the ad under conditions of high involvement / high elaboration likelihood. Heath (2012) has argued that when the potential for conscious cognitive elaboration of advertising material is high, consumers are much more likely to process that material critically and therefore advertising may be less effective. For example, when presented with celebrity endorsement consumers engaging in conscious reflection might become more alert to the possibility that their feelings are being manipulated by the use of a celebrity, recognise the irrelevance of the celebrity to an objective evaluation of the product and resist the intentions of the advertiser. This would fit with the findings suggesting that the use of celebrities is more effective under conditions of low involvement (e.g., Choi et al., 2005) and also points to the important role played by implicit (as opposed to explicit) evaluations in influencing consumers' responses to celebrity endorsement.

Research has been conducted into the impact that negative information about a celebrity might have on consumer evaluations of endorsed brands. Boeing and Marcon (2013) argued that those who are being targeted in terms of advertising tend to react favourably to a product when it has an associated celebrity, although there is also the ability to react adversely if the endorser is later portrayed in an undesirable light. Therefore, there is an element of risk for companies using celebrities to endorse their brands as any negative, public news concerning the celebrity is out of the company's control and could potentially reduce their brand appeal (Money, Shimp, & Sakano, 2006). As one fairly recent example showed, immediately following the incident surrounding Tiger Woods, the Accenture stock price fell by 2.9% (Thwaites, Lowe, Monkhouse, & Barnes, 2012). Till and Shimp (1998) stated that in terms of using celebrity endorsers, it is expected that positive feelings toward a celebrity transfer to the endorsed brand through the positive association that individuals build - therefore a positive representation of the celebrity leads to a positive evaluation of the brand being endorsed. However, in their research, Till and Shimp found that after an associative link has been forged between a brand and its celebrity endorser, any future negative information of the celebrity lowered brand evaluations. Furthermore, Carrillat, D'Astous, and Christianis (2014) found that negative views portrayed of a celebrity endorser not only changes attitudes of the endorsed brand, but also the attitudes of competitor brands within the same market.

As discussed in section 1.2.4, a second type of risk can occur within advertising, particularly if the targeted audience is required to consciously think too much about the intentions behind the ad. In everyday life, it is common for one object to generate conflicting evaluative responses, and therefore, an important research question concerns the mental processes that underlie explicit and implicit evaluations and the causal factors that lead to

changes in the two kinds of responses (Gawronski & Bodenhausen, 2006). The APE model (Gawronski & Bodenhausen, 2011) distinguishes between implicit and explicit processing by proposing that implicit evaluations are the outcome of associative processes, whereas explicit evaluations result from propositional processing. In relation to celebrity advertising, it seems likely that the celebrity effect results from triggering such implicit, associative evaluations. If Heath's (2012) view is correct, therefore, it may be that to some degree the success of celebrity endorsement also rests upon not encouraging consumers to engage in explicit propositional evaluation of advertisements where celebrity endorsement occurs.

Research by Forehand and Perkins (2005) has shown how conscious reflection about celebrity advertising can impact upon young adults' self-reported judgments about the advertised brand, finding that young adult students were able to recognise that such advertising tactics (celebrity endorsement) were used to manipulate their preferences. Examining the effects of celebrity brand endorsement upon both explicit and implicit responses to the brand, Forehand and Perkins used celebrity voiceovers in ads, and checked brand preferences when participants did or did not recognise the celebrity in the ad. As discussed previously, many advertisers choose to use celebrities in their campaigns in the hopes that positive evaluation of the celebrity transfers to the associated brand (Till & Shimp, 1998; Till, Stanley & Priluck, 2008), however many of these ads use celebrity images and/or visual representation in the form of video campaigns. In both of these instances consumers are able to see the celebrity endorser. Advertisements containing celebrity voice-overs, however, provide no visual feature of the celebrity, and often fail to acknowledge the celebrity's existence (Forehand & Perkins, 2005). This may mean that consumers are unaware that a celebrity is being used within advertisements, and as such celebrity influence may occur without knowledge from the consumer. To investigate the effect of ads containing celebrity voiceovers, Forehand and Perkins (2005) used both explicit and implicit measures to assess whether they prompted participants to align their responses to the advertised products with their response to the celebrities.

Undergraduate students were tested over three different time points. After initial ratings of celebrity familiarity, celebrity liking and brand attitudes at time one, participants completed a series of IATs at time two. Three weeks later undergraduates watched a series of television advertisements and completed further IATs to test the strength of association between the brands that had been advertised and the pleasant/unpleasant attributes. To complete the experiment, participants were asked to complete a final questionnaire which measured brand attitude, celebrity identification and celebrity-brand fit.

Young adults who were unable to identify the celebrity voice in an advertisement altered both their explicit and implicit attitudes to a brand to become more positive, in line with the persuasive intent of the advertiser (an 'assimilation response'). When students recognised the celebrity voice within the ad their explicit attitude to the brand became less positive (a 'contrast response'). Forehand and Perkins argued that participants who recognised that the celebrity was being used to influence their conscious judgment appeared to consciously 'reset' their explicit response to the brand in a negative direction. Importantly, however, there was no such resetting effect for implicit judgments and implicit preferences

remained in line with their attitude to the celebrity. These findings suggest that although conscious propositional processing might enable adults to resist the effect of celebrity endorsement in their explicit judgments, protecting against its implicit effects could be far more difficult. It may be that even adults have very little defence against the effects of implicitly acquired affective associations which strongly influence our lifestyles as consumers (Nairn & Fine, 2008).

Forehand and Perkins (2005) acknowledge that the celebrities used within their experiment may not have been recognised by participants, and this could have had implications on the reported results. Whilst it is suggested that "most" of the participants recognised at least "some" of the celebrities, not all participants recognised all of the celebrities during the celebrity familiarity stage, and therefore celebrity identification in the tasks may not have been possible for some participants at times when it should have been. It could be possible that participants who could and could not identify a celebrity differed in important ways beyond recognition (Forehand and Perkins, 2005). Future research would benefit from implementing a method whereby celebrity familiarity was measured before inclusion in explicit and implicit measures. A methodological design personalised to each individual participant would ensure that celebrities had (or had not) been identified, thus eradicating the concerns of recognition.

The study by Forehand and Perkins (2005), whilst only correlational in design, lends support to the notion that the liking of the person who endorses a brand may affect implicit evaluations. This study only used celebrity voice-overs when the majority of advertising that consumers are exposed to in society today is visual in its nature. Examining this would provide a further insight into celebrity endorsement of brands aiding in the explanation of our behaviours and preferences as consumers. It is possible that this may elicit different results to those found by Forehand and Perkins. In the design of their study the celebrities were 'hidden' from participants, and this could raise questions as to how representative this study was in relation to typical advertising campaigns. Recognition of the 'hidden' celebrities in the radio ads could have triggered a sense of being manipulated in these participants which then led to resistance, however in much of the advertising campaigns that we are faced with as consumers, celebrity endorsers are typically exposed. It would therefore be beneficial to this research area to extend the examination of explicit and implicit effects of celebrity advertising where the celebrity is readily available for the participant to acknowledge.

The more recent work of Ilicic and Webster (2014) offers some support for the notion that celebrity endorsers being exposed may have a different effect on brand attitudes. Providing contrasting findings to that of Forehand and Perkins (2005), Ilicic and Webster (2014) examined the effects of celebrity 'eclipsing' on consumer explicit evaluations of endorsed brands. Eclipsing refers to a situation where the presence of a celebrity endorser in the advertisement completely overshadows the brand in a way that makes the celebrity the focal point of the advert over and above the product being advertised (Ilicic & Webster, 2014). One of the main findings of Ilicic and Webster's research was that high eclipsing in consumers with strong celebrity attachment enhances brand attitude, regardless of whether they perceive the celebrity and brand to either match or mismatch. In contrast to the findings

of Forehand and Perkins (2005), therefore, these findings suggest that where there is a strong preference for a celebrity this can lead individuals to be more positive in their reasoning about the associated brand even when they are aware of the persuasive intent of using celebrities in the ads.

In their review of research in this area, Bergkvist and Zhou (2016) pointed out that very few studies have looked at the extent to which liking a celebrity influences the effects of endorsement (possibly because of the assumption that it is well-liked celebrities that are usually chosen as endorsers). They reported mixed findings in the studies that have been carried out, with some studies finding positive effects on brand evaluations (e.g. Silvera & Austad, 2004) and others more equivocal (Fleck-Dousteyssier, Korchia, & Le Roy, 2012). However, all of the reported studies only assessed participants' explicit, self-reported responses which would be expected to depend upon propositional processing and did not test their implicit responses. In terms of Gawronski and Bodenhausen's APE model (2011), it could be that in these circumstances recognising a well-liked celebrity gives rise to propositional processing in participants that generates positive thoughts about the celebrity which have previously been consciously articulated, thus overriding any concerns about being manipulated and reducing the likelihood of participants demonstrating resistance to the aims of the advertisement.

Clearly there is a complex range of factors at work in the effectiveness of celebrity endorsement in advertising. One important question that arises, however, concerns the point at which the nature of an advertisement or its presentation brings about conscious reflection, which leads consumers to resist its intended effects in their explicit responses and whether this also impacts upon their implicit responses. In the research carried out by Forehand and Perkins (2005), it was enough for young adults to recognise celebrities in audio advertisements to cause them to guard against celebrity influence in their explicit brand evaluations. However, their implicit responses to the brands remained positive. In Ilicic and Webster's (2014) study, participants' strong liking for celebrities appeared to override any resistance to the ads that could have been engendered by conscious reflection. Further research is clearly needed.

1.5 Conclusions

Celebrities are often used in voice-overs in an attempt to promote brands and persuade buyers to purchase the product. Therefore, by taking a celebrity (to whom the consumer hopefully has a positive affective response) and pairing their voice with a brand may cause the consumer's positive attitude to the celebrity to be generalised to the brand. Because of this, voice-overs have the potential to influence the consumer implicitly – their judgments about the brand might be influenced without their awareness (Forehand & Perkins, 2005). If the same effect was seen for children, then it offers an argument for the long running debate surrounding the banning of advertisements that are aimed at children. Advertisements in Sweden that are aimed at children under the age of 12-years are banned due to their persuasive nature that children are unable to acknowledge and subsequently defend themselves from (Pine & Veasey, 2003). Therefore, the fact that the young adults in

Forehand and Perkins' (2005) study consciously recognised that they were being manipulated by the celebrity voiceover, meant that in terms of explicit judgment, they showed a dislike for the brand contained within it. Implicitly, however, the celebrity voiceover influenced students in a way that they showed a preference for it (Forehand & Perkins, 2005). Thus, whilst the young adults believed that they protected themselves against the intentions of the advertisements, implicitly they were heavily affected by the advertisers' persuasion.

Largely, the literature suggests that individuals are able to protect themselves against the explicit effects of advertisements by the age of 12-years-old (see review of literature in section 1.2). So, when they know it is a celebrity, they recognise that they are being "advertised to" and they can protect themselves. However, this is a problem for children aged eight- to 10-years, as they may not be able to counteract explicit effects of advertising due to the fact that, according to Piaget and Theory of Mind research, younger children are not good at picking up ambiguities. It thus demonstrates the true effects of advertising, even more so for children who may not even be able to defend themselves against explicit judgments.

The research carried out by Forehand and Perkins (2005) suggested that the recognition of celebrity voices in an advertisement is a determining factor of whether explicit and implicit attitudes towards a brand change for young adults but, so far, we remain unsure about children. Furthermore, the work of Forehand and Perkins used celebrity voiceovers, but what about when celebrity images are paired with brands? This is something which has yet to be studied but would provide a further insight into celebrity endorsement of brands and would aid in the explanation of our behaviours and preferences as consumers. When using the pairing of images, there should be even more chance of attracting a reset effect. Thus, it may be helpful for the eight-year-olds but may also be more likely to lead to lessening the implicit effect. This would be especially valid when considering that the large majority of advertising that children encounter comes from visual, rather than vocal media. In terms of explicit attitudes, recognition of celebrity voiceovers allows young adults to protect themselves from their affective responses to celebrities in their explicit brand judgments, yet in terms of implicit attitudes, young adults seem unable defend themselves against their implicit affective associations.

Reviewing the literature formulates new research questions: at what age do children truly understand the 'persuasive intent' of advertising? Can children as young as eight- and 10-years protect themselves from the explicit effects of advertising, or does this apply only to older children and adults? To what extent can children and adults defend themselves against its implicit effects? And to what extent does scepticism to advertising and advertising literacy buffer the unwanted effect of celebrity advertisements? As a first step to answering these questions, the work carried out by Forehand and Perkins (2005) was extended to look at advertisers' use of celebrities in a visual context. This was considered to be an appropriate starting point as children as young as eight- to 10-years of age have been previously shown to have precocious understanding of advertisers' intentions in using celebrity endorsement (Rozendaal, Buijzen et al., 2011). Furthermore, whilst research has been conducted into celebrity voiceovers as a form of brand endorsement, research is currently lacking in the field of celebrity images used in advertisements.

As discussed throughout this literature review, research and theories which have looked at children's explicit judgments have been somewhat mixed in their conclusions concerning the age at which children understand the persuasive intention behind advertising. Largely, celebrity endorsement is considered to be one of the first advertisers' tactics that children recognise (Rozendaal, Buijzen et al. 2011) and are not vulnerable to (Hudders et al., 2017), suggesting that children comprehend why celebrities are used to endorse products (Lawler & Prothero, 2003). Although unlikely, it is not unreasonable to expect to see children defend themselves against the explicit nature of advertising. Nevertheless, it is beneficial to follow up Forehand and Perkins' (2005) study to investigate the effects of celebrity endorsement on children's implicit and explicit judgments, testing whether even a weak connection with celebrity leads to an effect. This requires children of varying ages to be studied to address the age at which children are able to recognise explicitly the persuasive intent of television advertising - at present this holds much debate.

2 Introduction

2.1 Background

The research for this thesis commenced towards the end of 2012 and focused upon one specific advertising technique - pairing celebrities with brands. Research has shown that children's understanding of ad techniques varies, but by eight-years of age they appear to have a good grasp of celebrity endorsement (Rozendaal, Buijzen et al., 2011). Previous research has only focused upon children's self-reported responses. Therefore, the research reported throughout this thesis examines how and when celebrity advertising influences brand judgments in children and young adults (both on an explicit and implicit level), and whether the relationship between advertising and scepticism could potentially protect children and young adults from the potential unwanted adverse effects of celebrity advertising. To date, no research has considered the effect of celebrity advertising on children's advertising judgements in an implicit, as well as explicit, way, and whether scepticism to advertising could provide some protective barrier.

Literature tends to agree that pairing celebrities with brands makes attitudes towards those brands much stronger (Erdogan et al., 2001). This is a finding which many studies have replicated, and generally research with adults supports this view. Research by Bergkvist and Zhou (2016), however, reports mixed findings in studies that have been carried out. Whilst some studies have found positive effects on brand evaluations (e.g. Silvera & Austad, 2004), others have found more ambiguous results (Fleck-Dousteyssier et al., 2012). Additionally, there is literature to suggest that children seem to have a good understanding of the aims of celebrity endorsement from the age of approximately eight-years of age (Rozendaal, Buijzen, et al., 2011). However, all of the reported studies only assessed participants' explicit, self-reported responses which would be expected to depend upon propositional processing and did not test participants' implicit responses. Furthermore, previous developmental work suggests that adults and older children should be able to resist the effect of advertisements, and this has been linked to developing advertising literacy. Very little is known about the implicit effects of celebrity endorsements on children's and young adults' responses, nor how, or to what extent, advertisement scepticism plays a part in moderating these effects.

The research within this thesis first involved trialling a specially designed computer programme with a sample of young adults, to test the hypothesis that young adults could resist the celebrity effect on an explicit, but not implicit, level. However, results from this study found that young adults had both an explicit and implicit preference for celebrity paired brands, offering some support for Rozendaal Buijs et al's. (2016) prediction that implicit and explicit judgments may interact. These initial results did not replicate previous findings (e.g. Forehand & Perkins, 2005), and so the thesis shifted focus to examine why adults were susceptible to brands paired with well-liked celebrities, when they should be able to defend against advertising's unwanted effects. Two further studies involved a development of materials, so real brands rather than novel brands were used, and the adaptation of a scepticism scale was included. Findings revealed that well-liked celebrities and celebrities only known (but not particularly well-liked) elicited differing results – when celebrities are

considered well-liked the celebrity effect is difficult to overcome on an explicit level, yet when the celebrity is simply known, resistance to the associated brand can be established. Furthermore, scepticism to advertising seemed to hold some importance. With this finding cemented, it was possible to use this knowledge and apply it to investigate developmental differences in children aged eight- to 14-years. At the start of this research, explicit, conscious preferences were measured, alongside brand preferences and scepticism, and this led to the development of a more detailed scepticism scale and the testing of both explicit and implicit preferences of celebrity paired brands.

2.2 Summary of Theoretical Framework

This thesis focuses upon the effect of pairing celebrities with brands upon children's and young adults' responses to advertising. Young adults were included to provide a benchmark against which the development of children's responses could be addressed. This has not been straightforward as theoretical perspectives upon children's developing understanding of advertising is fairly limited and rooted in Piaget's general theory of cognitive development – a theory adapted by John (1999) to formulate a stage like sequence of development. More recently, there have been some attempts to explain children's understanding of ads using a Theory of Mind perspective, although the impact of this research has been very limited. In line with Piaget's account of cognitive development, and children's increasing cognitive competence, research tends to suggest that as children develop so too does their ability to identify advertising and recognise its persuasive and commercial intent. Following from the work of Piaget, Friedstad and Wright's (1994) Persuasion Knowledge Model (PKM) was created. This proposed that, compared with older children and adults, younger children find it difficult to appreciate the information contained in advertising and struggle to recognise that advertisers present information from the perspective of their clients in seeking to persuade the recipient and influence their behaviour. Building on the work of Piaget, the PKM explains that, in general, older children (like young adults) are better able to reflect upon their own thinking and the thoughts of others, and as such can think in a more abstract way. Theory suggests that this corresponds with their ability to understand more about the purpose and intent of advertising. This ability (sometimes called 'advertising literacy') Rozendaal, Lapierre, et al. (2011) has been seen as providing children and adults with protection against advertising's potential adverse effects. It has been assumed that advertising literacy skills require the ability to consciously process information about advertising.

Little research has looked at whether implicit cognitive processes have a part to play in how children respond to advertising and, on this basis, the work of Piaget and the PKM may not be sufficient in explaining the celebrity effect. The conscious reflective skills the PKM and Piaget suggest are necessary for adult competence, yet modern ad techniques call into question the utility of Piaget and the PKM as much of modern advertising is aimed at influencing our "gut" feelings rather than our conscious processing. It is important to reflect on the difference between explicit and implicit judgments, as Nairn and Fine (2008) stated that adults have very little defence against the effects of implicitly acquired affective associations which strongly influence our lifestyles as consumers. Advertising campaigns

now take various different forms – Internet ads, tailored pop-up ads, embedded ads in games - to name just a few, with advertisers using varying techniques to make their ads "stand out" from the others. One such popular technique is celebrity endorsement.

An important question about the celebrity effect in advertising concerns how it actually works. Although there has been a large amount of research carried out to look at the effects of celebrity endorsement, for example on brand attitudes, purchase intentions and brand evaluations, surprisingly few studies have looked at the underlying psychological mechanisms (Bergkvist & Zhou, 2016). There does, however, seem to be consensus in the literature that evaluative conditioning could be a key process (e.g. Fennis & Stroebe, 2015; Forehand & Perkins, 2005; Till & Shimp, 1998; Till et al., 2008). Evaluative conditioning is defined as a change in liking, which occurs due to an association with a positive or negative stimulus (De Houwer, Thomas, & Baeyens, 2001). It is important to consider that whilst advertisements are aimed at influencing consumers' behaviour through persuasive intentions, not all ads use a direct persuasive attempt. Instead, some advertisements are concerned more with evaluative conditioning of an affect towards a brand or product. This can be problematic if the targeted audience is required to consciously think too much about the intentions behind the ad. Conflicting evaluative responses to the same object is ordinary in everyday life, and therefore an important research question concerns the mental processes that underlie explicit and implicit evaluations and the causal factors that lead to changes in the two kinds of responses (Gawronski & Bodenhausen, 2006). This thesis integrates dual-process models from the perspective of consumer psychology from relevant theoretical strands such as the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986) and the Associative— Propositional Evaluation (APE) model (Gawronski & Bodenhausen, 2011). Both of these theoretical models go some way to offering dual-step and dual-process perspectives which distinguish between implicit and explicit processing.

What these models fail to consider are the potential effects that scepticism towards advertising may have on children's judgments. Recent work in the area (e.g. Rozendaal, Lapierre, et al., 2011) has suggested that the development of advertising scepticism – which some researchers have treated as an affective response to ads – may be important in helping children combat the negative effects of advertising. This thesis therefore builds upon theory and models provided in existing literature, to enhance the current thinking and research in the field of children's advertising development. More specifically, it looks to propose a new model to explain why older children and young adults are less vulnerable to advertiser messages by incorporating both advertising knowledge and scepticism (accuracy- and affect-based scepticism) into the model in a novel way.

2.3 Aims

The research for this thesis was carried out due to the lack of research exploring the developmental nature of celebrity advertising, and the effect it has on children's implicit and explicit brand judgments. Because children's implicit responses have not been investigated previously, there is a need for this research and it is possible that a dual-process model may be required. Research suggests that conceptual advertising literacy may not be helpful in

guarding against the celebrity effect (Rozendaal, Opree, et al., 2016), but attitudinal literacy might. A negative disposition towards ads might be useful. Hudders et al. (2017) cited that not only do children have a limited dispositional advertising literacy (e.g. knowledge of advertising and its intent) but they also have difficulty applying such knowledge (situational advertising literacy). With this in mind, scepticism was also studied. As discussed in section 1.2, previous research suggests that a dual-process model is needed to explain explicit and implicit advertising judgments, but the research in this thesis aimed to look at existing models from a developmental perspective, as well as incorporating scepticism into the model to explain how explicit and implicit judgments are influenced. In particular, the research aimed to achieve the following objectives:

- 1. To identify the effects of pairing celebrities with brands on children's and young adults' explicit and implicit brand responses.
- 2. To assess whether, and at what age, children and young adults demonstrate resistance to the effects of pairing celebrities with brands.
- 3. To explore whether differences occur in individuals' explicit and implicit responses to celebrity paired brands.
- 4. To begin to investigate the importance of scepticism in advertising judgments more specifically between different types of advertising scepticism and responses to celebrity paired brands.
- 5. To begin to develop a new model of advertising response which incorporates the effects of ad scepticism in a novel way.

2.4 Methods

The research described in this thesis used a quantitative approach. Explicit responses throughout these studies were measured using likert scales presented to participants. These scales were either in the form of paper questionnaires, or scales incorporated within a computer programme which also served to examine implicit responses. These scales allowed for explicit preferences for brands to be calculated, alongside overall brand choice. Many of the studies reported previously in the literature review have successfully measured children's explicit preferences and/or attitudes to advertisements through self-report, likert scale questionnaires, with relative ease and success (see Hudders & Cauberghe, 2018; Hudders et al., 2016; Hudders et al., 2017; Rozendaal et al., 2009; Rozendaal, Buijzen et al., 2011; Rozendaal, Lapierre et al., 2011; Rozendall, Opree et al., 2016; and Rozendaal, Buijs et al, 2016). To measure implicit responses, the studies discussed in this thesis used the Implicit Association Test (IAT) - a test developed by Greenwald, Nosek, and Banaji (2003), which assumes that individuals respond more quickly in identifying categories when presented with concepts they already associate together, compared with those they do not associate. An evaluation of the IAT method, including its reliability and validity was discussed in section 1.2.3.

Research by Forehand and Perkins (2005) has provided evidence that the IAT can be successfully used with undergraduates in studies interested in brand evaluations, and this in

itself offers a valid reasoning as to why the IAT method is employed in the research discussed throughout this thesis. The IAT has also been used successfully in research with children of varying ages to examine their implicit attitudes on a range of factors such as bullying, gender and race (McKeague et al., 2013). More specifically, research has shown to be successful in measuring implicit knowledge of advertising to children. In research looking at children's implicit and pre-explicit perceptions of alcohol advertisements, Nash, Pine and Messer (2009) highlighted that studies which include an implicit measure are more able to capture the complexity of children's thinking, a view supported by their own research findings which demonstrated that using an IAT provided a far richer insight into the children's views than their own verbal reflections. Whilst earlier experiments in their research found that older children expressed a dislike for alcohol advertisements (Nash et al., 2009), the implicit measures in their later experiments highlighted that children of all ages had a liking for these ads.

Similar findings have since been reported by Monnery-Patris, Marty, Bayer, Nicklaus and Chambaron (2015) who, in their study into attitudes towards food, found that children's categorizations of nutritional foods increased with age, which for older children contrasted their implicit attitudes. Monnery-Patris et al. (2015) suggested that this may be because their explicit categorisations involved an awareness and appreciation of social norms, and the benefits of some food types were less likely to be reflected in their implicit attitudes. Research papers such as these, which have used multiple methods for testing children's attitudes towards advertisements, emphasises the necessity for both explicit and implicit measures to be incorporated, in order for accurate information about the impact on advertising to children to be disseminated (Nash et al., 2009). Being able to use the IAT with children highlights that the IAT is a flexible task that can be used to test associations from many different pairs of concepts (Gawronski & De Houwer, 2014).

Previous research has been able to successfully adapt the IAT method for the appropriate age of the child being tested (McKeague et al., 2013). In more recent research, Williams and Steele (2016) has shown that the reliability of the IAT when using child samples is as high as when the IAT has been used with adults. A concern of some research with children highlights that children aim to please and can therefore be biased in their selfreporting. The IAT method has been shown to remove this concern (Williams & Steele, 2016). The IAT is also well suited to being adapted to children of pre-school age. Cvencek, Greenwald and Meltzoff (2011) used the Preschool Implicit Association Test (PSIAT) to raise an argument against the view that children under the age of six years find such methods too cognitively demanding (Castelli, Zogmaister & Tomelleri, 2009). Due to the common use of insects and flowers on typical IATs with adults (Rudman, 2011) and children, Cveneck et al. (2011) used this stimuli to assess the implicit nature of this attitude with four-year-old children. Adaptations such as using images and words narrated to children, shortening the length of the trials completed, and response buttons coloured to match each side of the screen, Cveneck et al. (2011) found positive implicit attitudes towards flowers, highlighting that the IAT can be adapted for pre-school children, and that the adaption of the method obtained results in the expected direction, and in line with older children.

Finally, and in providing further support for the IAT being an appropriate choice of method for the studies reported in this thesis, Gibson (2008) suggested that the IAT method is best used in studies within consumer research as advertisements are often based on associative learning. As discussed in section 1.4, advertisements are increasingly using celebrities in advertising campaigns in the hopes that consumers will transfer the positive attitudes of the celebrity to the brand.

In the current thesis, where the IAT was used, participants were presented with the categories 'Celebrity Brand', 'Non-Celebrity Brand' (or 'Brand Alone' in later studies), 'Good', and 'Bad' ('Attributes'), and stimuli from one of those four categories were presented one at a time on a computer screen. This follows the standard procedure for administering IATs devised by Greenwald et al. (2003). Throughout the test participants were required to categorize the stimuli as quickly as possible, making as few errors as possible. Participants were instructed to use the 'Z' (L response) and 'M' (R response) key on the computer keyboard to indicate whether the presented stimuli matched that of the category presented on the upper-left or upper-right side of the computer screen. The first two stages of each IAT were practice trials which aimed to reinforce participants' recognition and discrimination of the good and bad attribute words, and celebrity and non-celebrity (or brand alone) brands. In Stage 1, participants used the 'Z' and 'M' keys on the keyboard and were instructed to press 'M' (R response) when they saw a bad word, and 'Z' (L response) when they saw a good word. Participants' ability to discriminate between celebrity and noncelebrity brands (or brand alone) was then tested in Stage 2. As before, participants used the 'Z' and 'M' keys on the keyboard and were instructed to press the 'M' key when they saw a brand that had been previously paired with a celebrity, and 'Z' when a non-celebrity brand (or brand alone) was shown. Each brand remained on screen until participants registered a response, and an incorrect response was highlighted using a red cross appearing on the screen. Participants were instructed that if a red cross appeared they must respond correctly to continue with the trial.

Next, the brand IATs were run to assess the strength of association between celebrity and non-celebrity brands (or brand alone) and good and bad attributes. Participants were again required to press one of the two response keys ('M' or 'Z') and received instructions at each stage upon when to make a right or left response. In the first test trials (Stage 3), celebrity paired brands were paired with good attributes (non-celebrity paired brands / brand alone with bad attributes). The key orientation was switched followed by further practice trials (Stage 4), and then the final test trial (Stage 5) asked participants to respond to non-celebrity paired brands / brand alone and good attributes (celebrity paired brands with bad attributes).

Upon completion of the test trials, a score of "Too Fast" was generated for participants who had response times recorded as less than 300ms for more than 10% of their trials - as such data was not gathered for these participants. For the remaining participants, the computer program automatically generated an individual D-score using the D-algorithm following the recommendations of Greenwald, et al. (2003). This was calculated by using the average response time from Stage 5 (celebrity brands paired with bad attributes) minus the average response time for Stage 3 (celebrity brands paired with good attributes), this

difference was then divided by the pooled standard deviation generated at Stage 5. A positive score means the items paired in Stage 5 have a weaker association than those paired in Stage 3, and therefore positive D scores represent faster times for the celebrity brand/good pairing and an implicit preference for celebrity brands.

Study 1 used an experimental computer-based method to explore the preferences of explicit and implicit novel brands (i.e. created by the experimenter) paired with well-liked celebrities and neutral non-celebrities in both young adults (n = 70) and young children (n = 21). After initially rating their preference to celebrities, non-celebrities and novel brands, participants were asked to rate the brands again after they had been paired with either a celebrity or a non-celebrity (neither liked nor disliked). The computer programme automatically selected brands and non-celebrities that the participants had initially rated neutrally, and celebrities they had rated as well-liked. Participants were then presented with an Implicit Association Test and, lastly, participants were asked to choose their favourite three brands from those originally presented. Findings indicated that children and young adults had both an implicit and explicit preference for novel brands that had been paired with a celebrity they liked and, furthermore, their final brand choices tended to be those that had been paired with a well-liked celebrity.

Because, unexpectedly, the young adults in Study 1 showed no resistance to the well-liked celebrities, Study 2 focused on young adults only (n = 59). Study 2 utilised the same method as Study 1, with the added inclusion of persuasive taglines to accompany the novel brands. One possible explanation for the lack of resistance to celebrity paired brands in Study 1 was that without persuasive messages or taglines there may not have been a recognition of advertising and therefore acknowledgement of a persuasion attempt was not triggered. Study 2 addressed this concern and included accompanying taglines as indicators that the brands were advertising campaigns. As before, after initially rating celebrities, non-celebrities and novel brands, young adults rated the brands before completing the IAT. Finally, they were asked to choose their favourite three brands. Findings replicated those of Study 1, with young adults once again showing both an explicit and implicit preference for brands paired with celebrities they had a high liking for.

Study 3, again carried out with young adults (n = 72), moved from using novel brands to instead using brands that were known to the participants without being market leaders in their field. Prior to taking part in the experimental procedure each participant also completed an advertising literacy questionnaire - a short version of Rozendaal, Opree et al's (2016) Attitudinal Literary Scale for Children (ALS-c) which was adapted for use with the sample of young adults. The scale consisted of two subcomponents looking at conceptual and attitudinal advertising literacy. The assumption of Studies 1 and 2 was that as experienced consumers of advertising, young adults would have a fully developed conceptual understanding of advertising and therefore that they would also be reasonably sceptical about advertising. This was tested in Study 3. As before, findings showed that young adults had both an explicit and implicit preference for brands that had been paired with well-liked celebrities. The 14-item Conceptual Literacy subscale was found to be unreliable, probably reflecting the adaptations made to the original scale to facilitate its use with adults. Because of this, the data from this subscale was omitted from analysis. The six-item Attitudinal

Literacy subscale, however, reached an acceptable reliability level and was included in the analysis. There was a significant negative correlation between attitudinal advertising literacy and both celebrity-paired explicit brand score and implicit brand preference score.

In the previous three studies the expectation was to see resistance in young adults' explicit responses. This failure to see resistance in explicit responses led to the implicit measure being left out of this study. Study 4 omitted the IAT from the method, focusing solely on examining why young adults were failing to show evidence of resisting the celebrity effect in their explicit judgments. Furthermore, this study moved away from using well-liked celebrities and became much more representative of our real-life advertising experiences where we experience brands presented with a range of celebrities which are known but not necessarily well-liked. Study 4 was a four-part questionnaire-based study. The first and fourth sections tested young adults' (n = 86) scepticism pre- and post- presentation of brands using a scale adapted from Obermiller and Spangenberg's (1998) Advertising Scepticism (SKEP) Scale. The second section of the questionnaire presented a sequence of images of brand logos presented on the type of backdrop boards often seen in media interviews or photographs. For half of the sample, a well-known celebrity was standing in front of the board, and the other half presented the backdrop without a celebrity. Participants were required to rate each brand presented. Brands and celebrities were counterbalanced across participants so that each brand was presented alone and with a celebrity. In the third section of the questionnaire participants were required to choose their favourite three brands. In contrast to the findings from Studies 1 to 3, findings showed that young adults had an explicit preference for brands presented alone rather than brands presented with a known celebrity. Furthermore, participants who scored higher on the scepticism scale before and after brand presentation had lower explicit preferences for brands presented with celebrities.

Study 4 demonstrated that celebrity liking and scepticism to advertising could be what drives explicit advertising preferences in young adults. Study 5 built upon this study and utilised the same methods with children aged eight to 14 years (n = 271) to examine developmental trends in explicit advertising judgments. Across the overall sample, results showed a higher preference for brands presented alone than presented with a celebrity, even in the youngest age groups. Furthermore, regardless of how the brands were presented, preference for brands decreased with age. Generally, brand preference was lower in the two older age groups (12-years and 14-years). Alongside this, scepticism increased with age, with the eight-year-olds being less sceptical than the older children. Even though the eight-year-olds were less sceptical than the older age groups in the sample, they still had an explicit preference for brands presented alone.

Study 6 maintained the stimuli presentation of advertising boards, to examine whether the results of Studies 1 to 3 were due to the method of the simple pairing presentation of celebrities and brands, or the effects of well-liked celebrities. The IAT method was also reintroduced to examine the celebrity effect in children's implicit judgments. In this study, children aged eight- to 14-years (n = 207) were presented with the advertising boards alone or with either well-liked celebrities (piloted and matched to their age) or known celebrities. Children were tested over a three-week period. In week one, they were presented with a

printed questionnaire which tested independently their initial brand liking; initial celebrity liking; and initial scepticism – a scale which was developed for this study to incorporate both accuracy-based and affect-based scepticism. In week two, they were presented with brands presented either alone or with a celebrity (either well-liked or known) where they were asked to rate each brand and choose their favourite three. An IAT measure similar to that used in Studies 1 to 3 was also included to test implicit responses. In week three, scepticism and brand ratings were once again tested.

Age differences were found across both celebrity conditions (well-liked and known). In the well-liked celebrity group, only the 14-year-old children showed resistance to the celebrity effect, and they had an explicit preference for brands presented alone. In contrast, in the known celebrity group, there was a significant explicit preference for celebrity brands over brand alone for the 14-year-olds. Eight-year-olds, 10-year-olds and 12-year-olds showed no significant difference in explicit preference for brands presented alone or with celebrity brands (well-liked or known). Younger children (eight- to 10-year-olds) had an implicit preference for brands presented with a known celebrity, whereas 14-year-olds had a significant implicit preference for brands presented alone. The implicit findings of the 14-year-olds matched their explicit preferences.

For the older children, an increase in scepticism (both accuracy-based and affect-based) was related to lower explicit preferences for brands presented with well-liked celebrities only, highlighting that the negative influence of scepticism was only seen when a celebrity was present. For the younger children, the opposite was true, and those with higher scepticism (both accuracy-based and affect-based) had lower explicit preference for brands presented alone. For the young children in the known celebrity group, affect-based scepticism was related to lower explicit brand alone preference. For both the younger children (aged eight- to 10-years) and older children (aged 12- to 14-years) very high celebrity liking was directly related to higher explicit celebrity brand preference. This relationship seemed to occur independent of scepticism.

2.5 Structure of thesis

This thesis is organised chronologically with each chapter outlining the six empirical studies. Firstly, Chapters 3 and 4 examine the impact of well-liked celebrities and neutrally rated noncelebrities upon the brand preferences of young adults and a small sample of children. In Chapter 5 the scepticism scale was introduced to assess advertising literacy in young adults in relation to explicit preference, implicit brand preference, and brand choice. Chapters 6 and 7 shifted focus slightly and examines the results of explicit preferences, brand choice, and scepticism when children and young adults were shown brands presented alone or paired with a known (rather than specifically 'well-liked') celebrity. Chapter 8 offers a reanalysis of the scepticism scale used in Studies 3 to 5, where general scepticism was split into accuracy-based and affect-based scepticism - as a result further analyses and explorations of the findings are offered. Chapter 9 discusses the final empirical study looking specifically at how well-liked and known celebrities influence children's explicit and implicit brand preference, brand choice and how this relates to advertising scepticism. Chapter 10 models the findings

of Study 6 and, finally, Chapter 11 completes the thesis with an overall discussion of the findings from all six studies, and includes an examination of the strengths and weaknesses, implications, and conclusions of this research. Recommendations for future work are also suggested.

3 Study 1

3.1 Introduction

The focus of the current chapter is to outline the first study conducted as part of this thesis. As discussed in section 1.2, traditional psychological theories such as Piaget and Theory of Mind predict that children's cognitive resources and their perspective taking abilities are not at adult level. More specifically, it has been proposed that their advertising knowledge could be more limited than that of adults. Therefore, it can be suggested that children should be less likely to show resistance in their explicit, propositional responses to ads, and therefore, when presented with celebrity-paired brands, they may not show resistance to the celebrity effect. Young adults, on the other hand, should recognise a persuasion attempt and resist the effects of pairing in their explicit responses. Some evidence for this can be found in research looking at product placement which, at least notionally, involves covert advertising. Gibson, Redker and Zimmerman (2014) found that for brands presented covertly in a popular TV show, when participants recalled seeing the brand they tended to report positive explicit brand attitudes. However, when participants were primed to expect persuasion to occur those who recalled the brand reported more negative explicit brand attitudes. These researchers explain their results in terms of propositional reasoning engaged in by participants who were alerted to the manipulation attempt and which led them to provide more negative responses. Recognition of persuasion attempt involves propositional reasoning, and children are less likely to show this.

However, because much of modern advertising aims at triggering an affective response, this study was also interested in implicit responses. This study takes a dual-process approach to try to understand the explicit and implicit processes involved in ad responses, and to investigate how children and young adults respond to advertising. Forehand & Perkins (2005) demonstrated that upon recognising a celebrity endorser, young adults resisted the celebrity effect by altering their explicit attitude to the brand against the persuasive intention of the advertiser. In Study 1 participants were presented with brands paired with celebrities they had already identified as being well-liked in order to explore the effect of such pairing on their explicit brand judgments. Forehand and Perkins also found that the effect of the ads was not resisted in their adults' implicit responses. Other research (e.g. Yoo, 2008) has also shown that incidental exposure to ads can lead to favourable implicit responses to brands in adults. Therefore, an additional aim of Study 1 was to examine implicit responses in a group of young adults and children, to add to the somewhat limited research within this field. Although young adults can seemingly control their explicit propositional responses to advertising, automatic associational responses may be more difficult to control and therefore it was expected that they would still show an implicit preference for brands paired with celebrities. Assuming children do not have an adultlike understanding of persuasion in ads, this proposal would also suggest that children should find implicit responses difficult to control and therefore children should also show an implicit preference for advertised brands.

As discussed in section 1.4.2, no research to date has considered the effect of celebrity advertising on both children's explicit and implicit responses to advertising on their advertising judgements. Furthermore, as discussed in section 1.2, advertising research which

has previously taken a developmental approach has largely used Piagetian theory or taken a Theory of Mind perspective to explain how and when children understand the persuasive intent of advertising on an explicit, conscious level. This study, and the thesis more widely, aims to further build upon these theories by examining the developmental nature of children's explicit understanding of celebrity advertising but, importantly a further purpose was to explore the development of children's implicit responses to celebrity advertising in order to begin to construct a dual-processing model of the development of advertising understanding.

The literature most relevant to this study can be found in sections 1.2.4 and 1.2.5, which explores research which has taken a dual-processing approach to social cognition. For example, Gawronski and Bodenhausen's (2011) APE model distinguishes between implicit and explicit processing, suggesting that implicit evaluations are memory associations or "gut feelings", whilst explicit responses require propositional processing. In using well-liked celebrity endorsers in this study, it was expected that positive feelings towards the celebrity would transfer automatically to the associated brand (Forehand & Perkins, 2005; Till & Shimp, 1998) in implicit judgments, leading young adults and children to demonstrate an implicit preference for celebrity paired brands. However, conscious reflection about celebrity advertising can impact upon young adults' self-reported judgments leading to resistance to the advertised brand (Forehand & Perkins, 2005). Rozendaal, Lapierre et al. (2011) call this the "cognitive defence" view of how children and adults resist the effect of ads. In line with the work of Piaget and Theory of Mind, younger children are unlikely to have developed the cognitive skills necessary to engage in this "stop and think" approach and, therefore, this study could expect to see different explicit and implicit preferences in young adults, but not in young children. Young adults are likely to recognise the manipulation attempt and guard against it in their explicit, propositional processing whereas children may lack the skills or cognitive resources to do so. For both age groups, however, automatic associational responses are more difficult to control and defending against the persuasion attempt is unlikely.

Currently, the proposed predictions are based on the idea that young adults, but not children, can recognise ads and consciously process a persuasion attempt via conscious propositional process which impacts on their explicit but not implicit responses. Rozendaal, Buijs et al. (2016) suggest that recognizing a persuasion attempt triggers negative affective response which impacts on attitude and scepticism, triggering explicit resistance. This would mean that for young adults we could see evidence of resistance in both their explicit and implicit responses. If children also recognise a manipulation attempt, then they might also hold negative feelings which might transfer to their brand judgments. Rozendaal, Buijzen et al. (2011) suggest that children as young as eight-years of age should recognise an attempt using celebrities, which would mean resistance in both their implicit and explicit preferences could emerge. However, children's propositional processing abilities are considered to be limited due to their underdeveloped cognitive abilities and, therefore, if they do not recognise the attempt then it would be expected that no resistance in either explicit or implicit preferences would be shown.

In Study 1, young adults and children were presented with images of well-liked celebrities or neutrally-rated non-celebrities paired with neutrally-rated brands. Novel brand logos created by the experimenter were presented so that participants' judgments could not be influenced by any pre-conceived attitudes to brands. A simple pairing procedure without any overt endorsement was utilised to ensure that participants had a good chance of recognising the irrelevance of the celebrity to their brand evaluation and potentially recognise the pairing procedure as an attempt to manipulate their brand judgment. The aim, therefore, was to set up conditions where resistance to the celebrity effect was likely to occur. Participants' explicit and implicit preferences for the brands were recorded along with their justifications for their explicit judgments. Their brand choice was also recorded. A key interest here was whether simply pairing well-liked celebrities with novel brands would trigger explicit and implicit preferences for celebrity-paired brands or whether adult participants would show resistance to the effects of celebrity.

Based on the existing literature, it was hypothesized that because of the greater ad knowledge or larger amount of cognitive resources available to them, young adults would recognise the persuasion attempt of the celebrity and therefore show no explicit preference for brands paired with celebrities. Whilst Rozendaal, Buijzen et al. (2011) predicted that children as young as eight-years recognise the tactics involved in celebrity advertising, the wider body of developmental literature suggests that children aged 10-years-old would not be able to resist the celebrity effect in their explicit judgements because of processing limitations and, therefore, if they don't recognise the attempt then it would be expected that no resistance in either explicit or implicit preferences would be shown. It was therefore predicted that children would be unable to alter their explicit or implicit judgments and thus preference for celebrity brands would be shown in both their explicit and implicit preferences.

In relation to implicit judgments there were two alternative predictions for the young adult sample. Firstly, based on the literature (such as Forehand & Perkins, 2005) which suggests that dual processes occur separately, it could be predicted that, because their affective associational responses to the celebrity pairing could be more difficult to control, young adults would have an implicit preference for brands paired with well-liked celebrities. Alternatively, based on the literature (such as Rozendaal, Buijs et al. 2016) which suggests that dual processes interact, it could be predicted that recognition of manipulation and persuasion in ad presentation, negative propositional processes should trigger negative associational implicit preferences also.

3.2 Method

3.2.1 Participants

70 young adults (55 female) from a UK University took part in this study in return for credit towards research participation requirements for their course award. The mean age of the overall young adult sample was 19.44 years (SD = 3.44). 21 Year Six children (11 female)

from a school in England also participated in this study. The mean age of the overall children's sample was 10.38 years (SD = 0.49).

3.2.2 Materials

Novel brand logos were used in Study 1. The fifteen coloured logos were designed by the researcher and measured 3" x 3" (see Appendix 3.1). Head and shoulder images of 10 celebrities and 10 non-celebrities measuring 3" x 3" were also presented at Stage 1 of the Study. The celebrity images were selected on the basis of being those which were most popular with a small pilot sample of teenagers (n=17) and young children (n=12) and non-celebrity images were then matched in terms of age, gender and facial expression. All tasks were presented on PC using a custom-built computer program. The program consisted of five stages:

Stage 1 - Initial explicit brand/celebrity/non-celebrity evaluation. Participants were presented with 10 celebrity faces (varied by age group tested) and 10 non-celebrity faces. For each one, presented individually in the centre of the screen, participants were asked whether they recognised the face which required a "Yes" or "No" response, followed with the question "how much do you like this person?" A scale of 1 = dislike to 9 = like was used. Participants were then shown a series of brands, again presented individually, and for each one were asked to say whether they recognised the brand "Yes or "No" and how much they liked it (1 = dislike to 9 = like). Overall, 15 novel brands were shown, alongside 10 real brands to ensure that the stimuli used looked more believable to the participants. Following these initial evaluations, for each individual the computer selected the four celebrities they had liked the best (i.e. score 9, 8, 7) and four non-celebrities they had rated most neutrally (5, then 4, 6) to be paired alongside the eight novel brands that were most neutrally rated (5, then 4, 6). For each participant, the four celebrities and four non-celebrities were then randomly paired with the eight novel brands for the remainder of the experiment.

At the end of Stage 1 each participant had provided the following data:

- a) Explicit Celebrity Evaluation score (1-9) for each of the celebrities
- b) Explicit Non-Celebrity Evaluation score (1-9) for each of the non-celebrities
- c) Explicit Initial Brand Evaluation score (1-9) for each of the novel brands.

Stage 2 - Presentation of selected brands paired with celebrity/non-celebrity images.

Each of the four celebrity (well-liked) and four non-celebrity (neutrally-rated) images selected at Stage 1 were then presented on-screen paired with the image of a neutrally rated novel brand – eight pairs in total. These pairings were presented side-by-side in the centre of the screen, with the rating scale depicted underneath the celebrity/non-celebrity and brand pairings. An example of the screen setup for this stage of the study can be seen in Appendix 3.2. Participants were told that they would be shown four celebrity brands and four non-celebrity brands, and they simply had to rate how much they liked the brand, on a scale of 1 = dislike to 9 = like. This was the Explicit Paired Brand Evaluation score (d). The Explicit

Paired Brand Evaluation score could then be compared with their Explicit Initial Brand Evaluation score before pairing (c) to produce an Explicit Brand Preference Change score (e). At the end of Stage 2 each participant had provided data for:

- d) Explicit Paired Brand Evaluation score (1-9) for each of the novel brands.
- e) Explicit Brand Preference Change score for each of the brands.

Stage 3 – post-pairing Explicit Brand Evaluation justification. Participants saw all the brand/person pairings and their mean celebrity and non-celebrity brand evaluation scores and asked why they responded in this way. The researcher wrote down the responses given.

Stage 4 - Implicit Brand Evaluations. The celebrity/non-celebrity images were omitted for Stage 4 which now just looked at brands. The computer program automatically selected the eight brands seen by each individual categorised into those that had been paired with a celebrity (celebrity brand) or a non-celebrity (non-celebrity brand). These two categories were used in the IAT which also utilised two further categories of 'good' and 'bad' words ('Attributes') – for example, happy, nice, sad, nasty, which were selected from standard attribute words used in typical IATs. For the brand IATs the celebrity or non-celebrity brands were paired with pleasant or unpleasant terms on each response key. The procedure for the IAT test was developed by Greenwald et al. (2003) and Nosek, Greenwald, & Banaji (2005). The assumption behind the test is that individuals will respond more quickly in identifying categories when presented with concepts they already associate together ('prefer') compared with those they do not associate.

The first two parts of the brand IAT were practice trials. The first reinforced participants' recognition of the *good and bad attribute words*. Participants used the 'Z' and 'M' keys on the keyboard and were instructed to press 'M' (R response) when they saw a bad word, and 'Z' (L response) when they saw a good word. Each word was presented twice to confirm that participants could discriminate between good and bad words [16 trials]. An incorrect response was highlighted using a red cross appearing on the screen, and participants were instructed that if a red cross appeared they must respond correctly to continue with the trial. Participants' ability to discriminate between celebrity and non-celebrity brands was then tested. In the image discrimination task, the four celebrity brands and four non-celebrity brands selected for that participant were shown one by one. As before, participants used the 'Z' and 'M' keys on the keyboard and were instructed to press the 'M' key when they saw a brand that had been previously paired with a celebrity, and 'Z' when a non-celebrity brand was shown. Each brand remained on screen until participants registered a response and each brand was presented three times to confirm that participants could correctly discriminate between celebrity and non-celebrity paired brands [24 trials].

Next, the brand IATs were run to assess the strength of association between celebrity and non-celebrity brands and good and bad attributes. Participants were again required to press one of the two response keys (M or Z) and received instructions at each stage upon when to make a right or left response. In the first test trials celebrity paired brands were paired with good attributes (non-celebrity paired brands with bad attributes). The key orientation was switched followed by further practice trials and then the final test trial asked

participants to respond to non-celebrity paired brands and good attributes (celebrity paired brands with bad attributes).

Upon completion of the test trials, the computer program automatically generated a D-score for each participant using the D-algorithm following the recommendations of Greenwald, et al. (2003) positive D scores represent faster times for the celebrity brand/good pairing and an implicit preference for celebrity brands.

At the end of Stage 4 the participant had provided:

f) Implicit Brand Evaluation (D-) score.

Stage 5 - Explicit Brand Choice. All eight brands were presented on the screen and participants were asked to rank in order the top three brands in terms of which they would prefer to buy. At the end of Stage 5 each participant had provided:

g) Brand Choice score.

3.2.3 Procedure

Ethical approval was gained from the Keele University ethics committee (see Appendix 3.3). Following the development of materials, participants were recruited using the School of Psychology Research Participation System (see Appendix 3.4) so that young adult students could sign up to gain course credit. Headteachers of schools in Staffordshire and Shropshire were sent a letter which thoroughly detailed the research requirements and the importance of the research. Headteachers who expressed an interest in allowing participation from children at their school were subsequently visited to discuss the research further. Agreement to participate was received from one school. Because the study was not considered to be of a nature which would be likely to cause upset with young children, the university's ethical panel deemed it suitable for a parental opt-out method to be employed. A letter was sent home to parents/guardians of all children eligible to participate which detailed the research aims (see Appendix 3.5). The letter gave details of the researcher's contact details as well as that of the supervisors in case anyone wished to discuss the research further. Parental letters were sent out by the school two weeks prior to data collection. Any forms returned to the schools were obtained by the researcher and it was ensured by the class teacher that children who had returned an opt-out form did not participate.

Data collection took place individually in a research room for the young adult sample and in an individual study room at the school for children. Young adults were given an information sheet to read (see Appendix 3.6) which provided detailed information about the study and what they would be required to do. Young adults who were happy to continue after reading the information sheet signed a consent form to indicate this (see Appendix 3.7). Children were given the instructions verbally and reminded that, although a letter had been sent home, participation in the study was voluntary and they could return to the classroom if they wished. Verbal consent was given by children who were happy to take part.

All experimental instructions were given via the computer programme and so young adults were left alone to complete each stage whilst the researcher sat quietly in the corner of the room. When participants reached Stage 3 (post-pairing explicit evaluation justification) they were instructed to call over the researcher so that they could write down their verbal responses. After completing this evaluation they were once again left alone to complete the remainder of the study. Upon completion participants were thanked for their participation and were given the opportunity to ask questions. Young adults were given a debrief form to read and take away (see Appendix 3.8). Children completed the same procedure as the young adult sample although the researcher sat with them and gave instructions at each stage. Upon completion a verbal debrief was given (see Appendix 3.9) before they were thanked for their participation and returned to the classroom.

3.3 Results – young adults

Explicit preferences

The mean initial preference scores or selected items across the whole young adult sample are shown in Table 3.1 below. This table highlights that whilst both the Explicit Non-Celebrity Evaluation score and the Explicit Initial Brand Evaluation score both received average ratings showing no particular like or dislike, the Explicit Celebrity Evaluation score shows a higher preference for the celebrities used in the study.

Table 3.1 Study 1: Young adult (n = 70) mean and SD initial Explicit Preference Ratings prior to pairing for selected celebrities, non-celebrities and novel brands (Min 1 – Max 9).

	Mean	SD
Explicit Celebrity Evaluation	7.71	1.30
Preference		
Explicit Non-Celebrity	5.00	.12
Evaluation Preference		
Explicit Initial Brand Evaluation	4.99	.49
Preference		

Explicit Paired Brand Preference score and Explicit Brand Preference change score are shown in Table 3.2.

Table 3.2 Study 1: Young adult mean (SD) post-pairing Explicit Brand Preference score (Min 1 - Max 9) and Explicit Brand Preference change score for brands paired with celebrities and non-celebrities (n = 70).

	Explicit Brand Preference score	Explicit Brand Preference change score
Brands paired with liked celebrities	5.48 (.95)	+.49 (1.08)
Brands paired with neutral non-celebrities	4.76 (.59)	23 (.74)

Although Explicit Brand Preference scores and Explicit Brand Preference Change score did not reveal a strong explicit preference for either set of brands, there was a significant explicit preference for celebrity paired brands over non-celebrity brands: t(69) = 5.059, p < .001, d = .27. Comparison of mean preference change for the brands before and after pairing with either celebrities or non-celebrities showed that preference for brands was significantly higher after pairing with celebrities (t[69] = 3.81, p < .001, d = .18) but significantly lower after pairing with non-celebrities (t[69] = 2.56, p = .013, d = .09). These results were in contrast to the expectation that young adults would guard against the influence of celebrity in their explicit post-pairing judgments.

Explicit brand choices

Participants selected their three favourite brands from the eight selected from their initial ratings to be paired with celebrities and non-celebrities. One young adult did not take part in the brand choice task. Looking at first choices only; out of the remaining 69 participants, 90% of young adults chose a celebrity brand as their first choice and 10% chose a non-celebrity brand.

Looking at the first three choices; celebrity brands were scored positively, and non-celebrity brands scored negatively with three points awarded to the first-choice brand, two points for second choice and one point for the third choice. For example, where a celebrity brand was first choice (+3) and then non-celebrity brands second (-2) and third (-1) choice the total score awarded was 0 (+3-2-1=0), representing no overall choice between celebrity and non-celebrity brands. Using this system, it was possible for participants to produce eight combinations of choices with possible scores of 6, 4, 2, 0, 0, -2, -4 or -6. There was an overall preference to choose celebrity brands: (M = 4, SD = 2.97) one sample t(68) = 11.186, p < .001.

Justifications for explicit brand judgments

Justifications given by young adults were recorded and fell into five categories independently agreed by the researcher and verified by a second researcher: ('celebrity influence', 'unfamiliar brands', 'visual appearance of brand', 'don't know', 'no answer'). 52% of the young adults stated that their explicit brand preference was due to celebrity influence, with 40% claiming a judgment couldn't be made as the brands were unknown.

Implicit brand preferences

The IAT produces a single score (referred to as D). The magnitude of the score indicates the degree of preference (.35 = medium effect size; .60 = large effect size; Rudman, 2011). As expected the results showed that young adult participants displayed a large implicit preference for the celebrity brands (D = .77): one sample t(68) = 11.326, p < .001.

3.4 Results – children

Explicit preferences

The mean initial preference ratings for selected items across the sample of children are shown in Table 3.3 below. This table highlights that whilst both the Explicit Non-Celebrity Evaluation score and the Explicit Initial Brand Evaluation score both received average ratings showing no particular like or dislike, the Explicit Celebrity Evaluation score shows a higher preference for the celebrities used in the study.

Table 3.3 Study 1: 10-year-olds (n = 21) mean and SD initial Explicit Preference Ratings prior to pairing for selected celebrities, non-celebrities and novel brands (Min 1 – Max 9).

	Mean	SD
Explicit Celebrity Evaluation	8.00	1.20
Preference		
Explicit Non-Celebrity Evaluation Preference	4.79	.46
Explicit Initial Brand Evaluation Preference	4.88	.50

Explicit Paired Brand Preference score and Explicit Brand Preference change score are shown in Table 3.4.

Table 3.4 Study 1: Mean (SD) post-pairing Explicit Paired Brand Preference scores (Min 1 – Max 9) and Explicit Brand Preference change scores for brands paired with celebrities and non-celebrities (n = 21).

	Explicit Paired Brand Preference score	Explicit Brand Preference change score
Brands paired with liked celebrities	6.66 (.96)	+1.78 (.89)
Brands paired with neutral non-celebrities	5.05 (.71)	+.17 (.50)

Explicit preference ratings for novel brands were compared after pairing with celebrities and non-celebrities. A paired samples t-test showed that for the 10-year-olds there was a significant explicit preference for celebrity paired brands over brands paired with non-celebrities: t(20) = 6.971, p < .001, d = 1.91. Mean preference change for novel brands before and after pairing with either celebrities or non-celebrities was compared using two t-tests. For the 10-year-olds, preference for novel brands was significantly higher after pairing with celebrities (t[20] = 9.062, p < .001, d = 2.34) but there was no difference in preference for the novel brands after pairing with non-celebrities (t[20] = 1.570, p > .05).

Explicit brand choices

Participants selected their three favourite brands from the eight selected from their initial ratings to be paired with celebrities and non-celebrities. Four children did not take part in the brand choice task. Looking at first choices only; out of the remaining 17 participants, 82% of children chose a celebrity brand as their first choice and 18% chose a non-celebrity brand.

Looking at the first three choices, using the scoring system applied with the young adult group (see above), celebrity brands were scored positively, non-celebrity brands scored negatively and a total score of 0 represented no overall choice between celebrity and non-celebrity brands. In the children's group there was an overall preference to choose celebrity brands: (M = 3.53, SD = 3.20) one sample t(16) = 4.542, p < .001.

Justifications for explicit brand judgments

The same five categories of response emerged as in the young adult group in justification of brand judgments ('celebrity influence', 'unfamiliar brands', 'visual appearance of brand', 'don't know', 'no answer'). The majority of children (76%) stated that their explicit brand preference was due to celebrity influence, with four stating they chose the brand due to colour or some other visual appearance. One child did not answer.

Implicit brand preferences

As expected the results showed that participants displayed a large implicit preference for the celebrity brands (D = .50): one sample t(17) = 7.125, p < .001.

3.5 Comparison of young adults' and children's explicit preference change

Further analysis of change scores comparing young adults and children was carried out using a 2 (age group) x 2 (brand type) ANOVA with age as the between group variable and brand type as the repeated measure. There was a significant main effect of age, with a greater change in preference scores following pairing seen amongst the 10-year-olds (M = .97, SE = .15) than the young adults (M = .13, SE = .08): F(1,89) = 25.576, p < .001, $\eta p^2 = .22$. There was also a significant main effect of brand type, with preference scores increasing for brands paired with celebrities (M = 1.14, SE = .13) but reducing slightly for those paired with non-celebrities (M = -.03, SE = .09): F(1,89) = 65.001, p < .001, $\eta p^2 = .42$. However, these main effects were qualified by a significant interaction: F(1,89) = 9.509, p = .003, $\eta p^2 = .10$. These results show that pairing with celebrities increased positive responses to the brands more amongst the children than the young adults, whereas pairing with non-celebrities led to a less positive response to the brands amongst young adults but made no difference to children's responses.

3.6 Discussion

This study has shown that simple pairing of well-liked celebrities with novel brand logos can influence explicit and implicit preferences for brands and brand choices in both young adults and children. Results showed that both young adults and children had an explicit preference demonstrating preference for brands paired with well-liked celebrities over non-celebrities. The same was shown for both young adults and children in their implicit preferences, with brands paired with well-liked celebrities being preferred to brands paired with non-celebrities.

Based on the previous work of Forehand and Perkins (2005) it was predicted that young adults would show explicit resistance to celebrity brands, yet no implicit resistance. This was in contrast to the view of Rozendaal, Bujis et al. (2016) who would predict that recognizing a persuasion attempt triggers negative affective response which impacts on attitude and scepticism, triggering explicit resistance. Therefore, for young adults we could

have expected to see evidence of resistance in both their explicit and implicit responses. Whilst the results of the implicit preferences are in line with those of Forehand and Perkins, the results of the young adults in Study 1 have failed to provide support for either of these findings in relation to their explicit preference. The sample of young adults and children failed to show resistance to the celebrity effect, showing an explicit preference for brands paired with celebrities.

Although previous research has shown that celebrity endorsement is one of the earliest advertising tactics that children understand (Rozendaal, Buijzen, et al., 2011), based upon the theoretical work of Piaget and the more recent work on Theory of Mind it was expected that children aged 10-years-old would not resist the celebrity effect in their explicit judgements because of processing limitations. Therefore, the results here for the children's sample are not surprising and suggest that, regardless of whether they understand celebrity endorsement, they may not be able to resist it. However, it was predicted that young adult participants would be able to guard against the effects of celebrity in their explicit preference judgments, and possibly in their brand choices, as they should realise that the celebrity images had no bearing on their evaluation of the brand and that the pairing had taken place in an attempt to manipulate their judgments. This was not the case, however. Therefore, the responses seen in Forehand and Perkins' (2005) participants when presented with audio advertising were not replicated here with visually presented materials.

Several factors could be important here. First, simple pairing of celebrity images and brands with no endorsement of the brand was intended to help participants to recognise that the celebrity was not really relevant to evaluating the brand. Also, novel brands were used to eliminate the possibility that participants already came to the study with prior feelings and beliefs about the brands. In fact, when brands are seen for the first time it could be that simple pairing with well-liked celebrities has a positive associational influence upon evaluative judgments of the brand because there is no other meaningful cue upon which to base the brand judgment. Furthermore, Heath (2012) has suggested that in order for cognitive defences against advertising to be engaged adults need to be able to recognise that they are being subjected to an attempt to persuade them. It may be that in Study 1, which used novel brands and simply paired them with celebrity images without any overt endorsement, participants did not feel that they were being subjected to advertising and therefore this did not trigger resistance to the celebrity-paired brands.

Interestingly, analysis of explicit responses demonstrated that pairing celebrities with novel brands increased positive responses to the brands more amongst the children than the young adults. On the other hand, pairing with non-celebrities led to a less positive response to the brands amongst young adults but made no difference to children's responses. This is somewhat unsurprising if we consider theory from the PKM (Friedstad & Wright, 1994) and Theory of Mind research which suggests that as age develops so too does the cognitive ability to understand the persuasive intent which lies behind advertiser messages. Whilst the young adults in this study also had an explicit preference for the brands paired with well-liked celebrities, results from this analysis do support the notion that celebrity advertising affects children more so than young adults.

It was expected that, because adults found it difficult to resist implicit preferences, so too would children, with children also displaying an implicit preference for brands paired with celebrities. With children's propositional processing abilities being considered to be limited due to their underdeveloped cognitive abilities, it was predicted that if they did not recognise the manipulation attempt of the celebrity then no resistance in either explicit or implicit preferences would be shown. This is what the results of the study demonstrated – children had both explicit and implicit preferences for brands paired with celebrities. This was in contrast to the prediction that because eight-year-olds understand about celebrity advertising they may also recognise a manipulation attempt, consequently holding negative feelings which might transfer to their brand judgments (Rozendaal, Buijzen, et al., 2011). This leads to the suggestion that whilst children could understand celebrity endorsement, they may not be developed in their knowledge of how to use this in their responses to ads.

In relation to the implicit results of the young adult sample two alternative predictions were offered. Following on from the research carried out by Forehand and Perkins (2005) it was expected here that young adults would find it difficult to protect themselves from the effects of celebrity influence in their implicit responses. The results were in line with this assumption. Rozendaal, Bujis, et al. (2016) suggested that recognizing a persuasion attempt triggers negative affective response which impacts on attitude and scepticism, triggering explicit resistance. This meant that for young adults we could have seen evidence of resistance in both their explicit and implicit responses. This was not shown in this study – instead it was found that explicit and implicit processes aligned.

Although the young adults didn't behave as expected in their explicit responses, the evidence from the implicit responses of both the children and adults suggests a clear effect of celebrity on implicit preferences. This reinforces the question of to what extent simply increasing conceptual (or propositional) knowledge of advertising has on protecting young adults from the effect of advertising. This result highlights that efforts to increase knowledge of persuasive intent in children may be, to some extent, not as purposeful as some believe but rather understanding what may influence our implicit judgments may be a more useful consideration help children to resist ads because the celebrity effect also impacts on their implicit responses. It could, however, also be possible that no-one felt manipulated and therefore propositional processing did not lead to a conclusion that manipulation was occurring. This requires further investigation. Nevertheless, taken at face value the results of this study have supported the limited findings in implicit research to date. But failure to find resistance in the adults exposes the need to explore this further.

In conclusion, the results of this study have supported the hypothesis that children would not resist the effects of celebrities in their explicit judgments and demonstrates that pairing celebrities with brands influence the overall implicit preferences of both young adults and children. However, this study has not provided support for the prediction that young adults would recognise the celebrity as an attempt to persuade, and no resistance was shown in their explicit judgments. Finding evidence of understanding in adults' explicit judgments was a key aim of this study, and results in support of this assumption would have provided further support for theoretical perspectives such as Piaget, Theory of Mind and the PKM that

adults have a sophisticated understanding of advertising, including its persuasive intent. With this in mind, the focus of the next study shifts, to examine further why the young adults in this study did not recognise celebrity pairing as a persuasion attempt in order to then be able to go on to examine the developmental progress of advertising understanding.

4 Study 2

4.1 Introduction

The results of Study 1 were unexpected, particularly in relation to the explicit preferences of young adults who, alongside children, failed to resist the celebrity effect. Exploring this effect in young adults is important in understanding the effect of celebrity advertising, and therefore Study 2 focuses solely on exploring further the celebrity effect in young adults. In Study 1, participants may not have demonstrated resistance to the celebrity effect because they did not feel that they were in an advertising situation. Study 2 builds upon the findings of Study 1 and attempts to address this concern by adding an advertising slogan when presenting the images and brands. Laran, Dalton and Andrade (2010) have described how consumer behaviour is often swayed by marketing tactics such as slogans, which often exert subtle, automatic persuasion (Shapiro, 1999). Furthermore, research suggests that consumers can more easily recognize how slogans are meant to influence their behaviour and this may increase the possibility that they will consciously attempt to correct (or resist) any unwanted bias encountered when presented with advertisements (Williams, Fitzsimons & Block, 2004). In line with this, Friestad and Wright (1994) have proposed that when consumers understand how a stimulus such as a slogan is intended to influence their behaviour, they are more likely to perceive it as a persuasion tactic. If this is the case, then by adding marketing slogans when presenting the celebrity/non-celebrity images paired with brands, it is more likely that resistance to the celebrity effect will be shown in young adults' explicit judgments.

In Study 2, young adults were again presented with images of well-liked celebrities or neutrally-rated non-celebrities paired with neutrally-rated brands with persuasive taglines. As in Study 1, the novel brand logos created by the experimenter were presented so that participants' judgments could not be influenced by any pre-conceived attitudes to brands and there was no overt endorsement. The simple pairing procedure was again utilised to ensure that participants had a good chance of recognising the irrelevance of the celebrity to their brand evaluation and potentially recognise an attempt to manipulate their brand judgment. Advertising taglines were created to include with each brand so that the participants had the opportunity to recognise that a persuasion attempt was being made. The aim, therefore, was to set up conditions where resistance to the celebrity effect was likely to occur and the participants were more likely to recognise an attempt to persuade them. Participants' explicit and implicit preference for the brands was recorded along with their justifications for their explicit judgments. Their brand choice was also recorded. A key interest here was whether simply pairing well-liked celebrities with novel brands, when a persuasive message is more obvious, would trigger explicit and implicit preferences for celebrity-paired brands or whether adult participants would show resistance to the effects of celebrity.

It was hypothesized that, with the taglines included, adults would recognise the persuasion attempt behind use of the celebrity and feel more manipulation than in Study 1. If this was the case, then it would be expected that young adults should show resistance to the celebrity paired brands and demonstrate no explicit preference for brands paired with celebrities, therefore demonstrating a negative change in preference for celebrity brands. In

relation to implicit judgments, it was predicted that in line with the results of Study 1, an implicit preference for brands paired with well-liked celebrities would still occur. This fits with literature suggesting that affective associational responses to the celebrity pairing is difficult to control. When asked to choose their favourite three brands, it was hypothesized that young adults may recognise the persuasion attempt of the celebrity and therefore resist the brands previously paired with celebrities to again show a non-celebrity brand preference.

4.2 Method

4.2.1 Participants

59 young adults (45 female) from a UK University, with a mean age of 19.59 (SD = 2.12) took part in this study in return for credit towards research participation requirements for their course award. Because 28 of these participants took part in Study 1 the data was also reanalysed with their data removed to leave a sample of 31 participants (25 female) with a mean age of 19.94 years (SD = 2.64). Both sets of analyses will be presented here.

4.2.2 Materials

Novel brand logos were also used in Study 2. Fifteen new coloured logos were designed by the author and measured 3" x 3" (see Appendix 4.1). The remainder of the materials were the same as those used in Study 1, except that when the celebrities/non-celebrities were presented, paired with the brands in Stage 2, a one-sentence advertising slogan (e.g. "Modern. Stylish. Classic. BRAVURA!", see Appendix 4.2) was also included running below the celebrity and brand images. All slogans were presented in Arial font, size 12. As before, the celebrity images were selected on the basis of being those which were most popular with a small pilot sample of young adults, and non-celebrity images were then matched in terms of age and facial expression. All tasks were presented on PC using the custom-built computer program used in Study 1. The program operated in exactly the same way as in Study 1, except that the celebrity/ non-celebrity brand pairings at Stage 2 also included the advertising taglines described above.

4.2.3 Procedure

Ethical approval was gained from the Keele University ethics committee (see Appendix 3.3). Following the development of materials participants were recruited – this involved advertising the study on the School of Psychology Research Participation System (see Appendix 3.4) so that young adult students could sign up to gain course credit. Data collection took place individually in a research room, where participants were given an information sheet to read (see Appendix 3.6) which provided detailed information about the study and what they would be required to do. If, after reading the information sheet, young adults were happy to continue, they signed a consent form (see Appendix 3.7). All instructions were given on the computer programme and the experimental procedure followed was exactly the same as for Study 1. Upon completion participants were thanked for

their participation and were given the opportunity to ask questions, they were then given a debrief form to read and take away (see Appendix 3.8).

4.3 Results

Explicit preferences

The mean initial preference ratings for selected items across the whole sample are shown in Table 4.1 below. This table highlights that whilst both the Explicit Non-Celebrity Evaluation score and the Explicit Initial Brand Evaluation score both received average ratings showing no particular like or dislike, the Explicit Celebrity Evaluation score shows a higher preference for the celebrities used in the study.

Table 4.1 Study 2: Young adult (n = 59) mean and SD initial Explicit Preference Ratings prior to pairing for selected celebrities, non-celebrities and novel brands (Min 1 – Max 9).

	Mean	SD
Explicit Celebrity Evaluation	7.75	1.13
score		
Explicit Non-Celebrity	5.02	.14
Evaluation score		
Explicit Initial Brand Evaluation	4.81	.58
score		

Explicit Paired Brand Preference score and Explicit Brand Preference change score are shown in Table 4.2.

Table 4.2 Study 2: Mean (SD) post-pairing Explicit Brand Preference score (Min 1 - Max 9) for brands paired with celebrities and non-celebrities (n = 59).

	Explicit Brand Preference score	Explicit Brand Preference change score
Brands paired with liked celebrities	5.46 (.98)	+2.29 (1.18)
Brands paired with neutral non-celebrities	4.72 (.68)	+.30 (.71)

These means are very similar to those reported in Study 1 for young adults. A comparison of explicit preference ratings for novel brands after pairing with celebrities and non-celebrities was conducted for the full sample of young adults in Study 2 (n = 59). Results showed that, as in Study 1, although there was not a strong positive response for either set of pairings, there was a significant explicit preference for celebrity paired brands t(58) = 4.629, p < .001, d = .88.

Because some of the participants in this study also took part in Study 1, even though a new set of brands were used here, a check was made to ensure there were no significant differences in the mean Explicit Brand Preference scores and mean Explicit Brand Preference Change scores across the two groups. Analysis showed that there were no significant differences for Explicit Brand Preference scores or mean Explicit Brand Preference Change scores across those who had participated in Study 1 and 2 compared to those taking part in the study for the first time (p > .05).

Brand choices

As in Study 1, participants selected their three favourite brands from the eight selected from their initial ratings to be paired with celebrities and non-celebrities. The scoring method used in Study 1 was also used in this study. Of the 59 participants taking part in this study, looking at first choices only, 64% of young adults chose a celebrity brand as their first choice and 35% of young adults chose a non-celebrity brand. There was no difference in responses of participants who took part in both Study 1 and 2 and those who took part in Study 2 only.

Explicit judgment evaluation

As in Study 1, the frequency of codings for the justifications given by young adults were recorded, organised into the same five categories ('celebrity influence', 'unfamiliar brands', 'visual appearance of brand', 'don't know', 'no answer'). The majority of young adults in Study 1 stated that their explicit brand preference was due to celebrity influence, whereas in Study 2 (regardless of previous participation) young adults tended to state that no judgement could be made as the brands were unknown. There was no difference in responses of participants who took part in both Study 1 and 2 and those who took part in Study 2 only.

Implicit preferences

The D score for the total young adult sample in Study 2 was 0.79 (SD = .72) showing that the participants held a large implicit preference for the celebrity brands one sample t(58) = 8.322, p < .001. As shown in their Explicit Brand Preference score, there was no significant difference in D score between the young adults who had also taken part in Study 1 (0.91) and those who had not previously taken part (0.68) p = .229.

4.4 Discussion

In Study 2, there was still a strong implicit preference for brands paired with celebrities but, despite adding advertising slogans beneath the celebrity/non-celebrity brand pairings, participants' explicit responses showed no evidence of resistance to the celebrity effect. Friestad and Wright (1994) suggested that when consumers understand how a stimulus such as taglines is intended to influence their behaviour, they are more likely to perceive it as a persuasion tactic which effects their explicit judgments. However, there was no evidence of this demonstrated in the findings of this study. Because this is the second time that this finding has emerged, it should be considered that the participants could have considered this as an advertising attempt, but their strong liking of the celebrities overrode resistance to a persuasion attempt. When there are strong positive feelings towards celebrities it is possible that manipulation attempts are overlooked meaning that conscious, propositional reasoning about them is not carried out and explicit responses are strongly influenced by a 'gut feeling' about the celebrity. Alternatively, it could be that the general effect of associating well-liked celebrities with brands is to create positive explicit and implicit evaluations of the brand (as, presumably, is assumed by those employing celebrity endorsement as a marketing strategy).

Across both Study 1 and Study 2 resistance to the celebrity effect has not been found. Previous research had suggested that resistance might be seen in explicit responses to brands, where participants were able to consciously reflect upon the presence of the celebrity image as an attempt to manipulate their brand judgment. In Forehand and Perkins' (2005) study, participants were played audio recordings of celebrity voiceovers in radio ads and it was the brand evaluations of the participants who recognised the celebrity which tended to become less positive. Recognition of the 'hidden' celebrities in the radio ads could have triggered a sense of being manipulated in these participants which then led to resistance. In contrast, in

the study reported here the identity of the celebrities was known and for each participant the celebrities paired with brands were those that they had identified as being well-liked. In Studies 1 and 2, therefore, there was no hidden manipulation for participants to detect and visual presentation of the liked celebrity alongside a brand was enough to bring about more positive evaluations of the brand.

It could be because that, in spite of the introduction of the slogans, participants still did not feel that they were being subjected to a persuasion attempt. Perhaps the novel brands created for these studies combined with the experimental situation gave rise to an experience that was not sufficiently lifelike to encourage participants to feel that they were being manipulated and therefore demonstrate resistance. In order to address this issue, in Study 3 novel brands were replaced with real brand logos.

Whilst there was once little research which has looked at the effect of modality in advertisements (Bryce & Olney, 2000) this is becoming an area of interest to advertisers, and therefore the difference in advertising stimuli across the studies reported here and that of Forehand and Perkins (2005) must be considered as an explanation for the contrasting results. In a recent study looking at the effect of presentation modality in TV ads for prescription drugs, Wogalter, Shaver, and Kalsher (2014) found that TV ads using both visual and auditory presentation produced the highest level of later recall and recognition. When separated into visual only and auditory only, the visual only ad produced better performance. This may go some way to explaining why the current studies reported in this thesis (which used visual stimuli) are different to those of Forehand and Perkins who used an auditory advertising method. The fact that visual stimuli has been shown to influence recall and recognition (Wogalter et al., 2014) could mean that the young adults in Studies 1 and 2 had more likelihood of the celebrity ads being remembered, more so than the young adults in Forehand and Perkins' study. This could have affected the preferences and choices made.

Another possible contributory factor is that being able to utilise cognitive defences really depends upon individuals being in possession of advertising literacy skills. For the first two studies, the assumption was that in samples of young adults advertising literacy skills should be at adult-like levels and, therefore, it was expected that participants would use these skills to protect themselves against any unwanted effects of advertising. Previous literature has suggested that advertising scepticism is an important offshoot of advertising literacy. For example, Rozendaal, Lapierre, et al. (2011) suggested that the development of advertising scepticism – which some researchers have treated as an affective response to ads – may be important in helping children combat the negative effects of advertising. However, researchers also argue that having a critical or sceptical attitude towards advertising (i.e. attitudinal advertising literacy) may be a more important determinant of how individuals respond to advertising. Obermiller and Spangenberg (1998) suggested that scepticism can be an important factor in ad effectiveness on its own, providing evidence that advertising scepticism is related to less positive responses to advertising amongst adults. Study 3 attempts to measure participants' advertising literacy via a short advertising literacy scale prior to responding to the brands. The main interest here was to see whether any differences

in advertising literacy skills were evident in the sample and, if so, whether this impacted on participants' brand preferences.

In conclusion, across Study 1 and Study 2 both explicit and implicit preferences in young adults were the same and, in these samples, young adults demonstrated preferences for novel brands paired with well-liked celebrities over and above brands paired with non-celebrities rated neutrally. Again, whilst evidence for dual-processing models is provided in the limited literature which has examined both explicit and implicit responses to advertising (e.g. Büttner et al., 2014), differences in explicit and implicit preferences would provide some evidence of separate processes, which the two studies reported thus far have failed to offer.

5 Study 3

5.1 Introduction

The aim of Study 3 was to extend the work of Study 1 and Study 2 by incorporating a measure of advertising literacy. The main aim of the study was to explore further why young adults in the previous studies demonstrated explicit preferences for novel brands paired with well-liked celebrities, over and above non-celebrities. In Study 1 and Study 2, the responses of the young adults and children did not conform to the expectations based on previous work. It had been expected that young adults would, at least in their explicit judgments, recognise the persuasion attempt of the celebrities and show resistance to this manipulation by showing preference for non-celebrity brands. This was not found in this study and is therefore inconsistent with the previous work of Forehand and Perkins (2005). Whilst Rozendaal, Bujis, et al. (2016) predicted that a negative affective response to manipulation may reflect in young adults and children's implicit preferences, the results of Study 1 and Study 2 did not echo this. Instead, these studies demonstrated an implicit preference for celebrity paired brands, providing support for the assumption that implicit preferences are difficult to overcome, even in young adults who are assumed to have a high level of advertising literacy. This study aims to examine the effects of advertising literacy and scepticism to advertising. The most relevant literature to this chapter can be found in section 1.3.

Typically, advertising literacy has been seen by researchers to include several components: the ability to recognise advertisements, an awareness of the source of advertisements; understanding both the selling intent and persuasive intent behind advertising (Rozendaal, Lapierre et al., 2011). Acquiring this kind of knowledge about advertising during childhood has been viewed as an important step in developing the ability to cope with any unwanted or harmful effects of advertising (Kunkel, 2010). Opree and Rozendaal (2015) have referred to this knowledge set as conceptual advertising literacy (i.e. knowledge about how advertising works). However, these researchers also argue that having a critical or sceptical attitude towards advertising (i.e. attitudinal advertising literacy) may be a more important determinant of how individuals respond to advertising. Work by Obermiller and Spangenberg (1998) and Obermiller, Spangenberg & MacLachen (2005), for example, has provided some evidence that advertising scepticism is related to less positive responses to advertising amongst adults. Furthermore, in work with eight- and 12-year-olds Rozendaal, Lapierre, et al. (2011) found no relationship between conceptual advertising knowledge and children's ability to utilise strategies to defend themselves against advertising, but high scores for attitudinal advertising literacy (i.e. representing a more negative orientation towards ads) were related to greater likelihood of engaging resistance strategies when faced with advertising. In Study 3, the short version of Rozendaal, Opree and Buijzen's (2016) Attitudinal Literary Scale for Children (ALS-c) was adapted for use with a sample of young adults. The scale consisted of two subcomponents looking at conceptual advertising literacy (ad knowledge) and attitudinal advertising literacy (subjective orientation towards ads).

The methods of this study were the same as in Study 1 and Study 2, except that instead of using novel brands, existing brands were presented which were selected on the

basis that they were likely to be familiar to participants without being market leaders in their field. No brand slogans were used in this study as they made no difference in Study 2 and it was considered that slogans for existing brands, if available, would not be easy to present in a consistent format. Prior to taking part in the experimental procedure, each participant completed the adapted advertising literacy questionnaire. As experienced consumers of advertising, it was expected that young adult participants would have an adult-like conceptual understanding and therefore the assumption that they would also be reasonably sceptical about advertising was tested. In line with findings from Forehand and Perkins (2005), it was hypothesised that young adults would recognise the persuasion attempt behind the use of the celebrity and use this manipulation attempt to offer resistance to the celebrity paired brands to demonstrate no explicit preference for brands paired with celebrities. However, an implicit preference for brands paired with well-liked celebrities was expected to be seen. In terms of advertising literacy, it was expected that scores would be at ceiling for both Conceptual and Attitudinal literacy.

5.2 Method

5.2.1 Participants

72 young adults (59 female) from a UK University with a mean age of 19.37 years (SD = 6.09) participated in return for course credit.

5.2.2 Materials

In addition to the adapted Attitudinal Literary Scale (aALS), all materials were the same as those used in Study 1 and Study 2 except that the celebrities/non-celebrities were presented paired with real brands (see Appendix 5.1) with no accompanying advertising slogan. Participants completed all tasks on PC, with the aALS scale containing a total of 20 items (Rozendaal, Opree et al. 2016) loaded onto an online survey platform and the remainder of the study was carried out on the specially designed computer programme used in Study 1 and Study 2.

Conceptual Advertising Literacy

Several items were omitted from the Conceptual Literacy Subscale as they were considered to be unsuitable for presentation to young adults. For example, some questions asked about requesting parents to purchase products - "are commercials on television there to make you ask your parents to buy the advertised products?" or using pocket money to buy products - "are commercials on television there to make you buy the advertised products out of your allowance?". This left 14 items, for which the wording was altered, to make them more appropriate to adults. For example, items referring to asking parents to buy a product, or using pocket money to buy a product were altered. The remaining items tested five components of advertising understanding with a series of questions (the full questionnaire can be seen in Appendix 5.2):

- **1.Recognition of advertising** (items 1, 2, 3) e.g. "Please watch this video is it an advertisement?" Participants could respond Yes, Definitely / Yes, I think so / No, I don't think so / No, definitely not.
- **2.Recognition of the source of advertising** (item 5) e.g. "Advertisements cost money. Who do you think pays to make ads?" A series of options were given (e.g. the people that make the products in the ad / the people in the ad / the TV network that carries the ad) and participants could choose one response.
- **3.**Perception of intended audience (items 6, 7, 8) e.g. "Please look at the following ad. Who do you think is the intended audience of this ad? Please be as precise as possible." This required a written response.
- **4.** Understanding persuasive intent (items 9, 10, 11) e.g. "Are advertisements there to make you [want/think positively/feel positively] about the advertised products?" Participants could respond Yes, Definitely / Yes, I think so / No, I don't think so / No, definitely not.
- **5.Understanding persuasive tactics** (items 4, 12, 13, 14) e.g. "The following statements describe five possible reasons why celebrities are used in advertisements. Please rank the statements in order of importance (with 1 being the most important)." Responses included (but weren't limited to) to make you buy the advertised product / to help people to learn about the products / to get people to believe what the ad says.

Attitudinal Advertising Literacy

For the Attitudinal Literacy Subscale three items were removed which were considered to be too repetitive for adults (e.g. 'how often do you think that television advertisements are truthful?' and 'how often do you think television advertisements tell the truth?') but retained the remaining six items and the wording used in the original questionnaire. All of the items in this scale were answered on a scale containing the responses Never / Sometimes / Often / Very Often. These items tested:

Understanding of advertising bias (item 15) e.g. "How often do you think that what you see in advertisements is like things are in reality?"

Scepticism towards advertising (items 16, 17) e.g. "How often do you think advertisements are truthful?"

Disliking of advertising (items 18, 19, 20) e.g. "How often do you think advertisements are boring/stupid/irritating?"

The original scoring system of Rozendaal, Opree et al. (2016) was used for all items (see Appendix 5.3) to produce a single conceptual literacy score (high scores representing high conceptual literacy) and a single attitudinal literacy score (high scores representing high scepticism). Once the scale had been completed, participants completed the explicit and implicit brand evaluation and brand choice tasks in five stages, exactly as carried out in

Studies 1 and 2 using the specially designed computer program. The only difference in Study 3 was that real brands were presented with no taglines.

5.2.3 Procedure

Ethical approval was gained from the Keele University ethics committee (see Appendix 5.4). Following the development of materials participants were recruited – this involved advertising the study on the School of Psychology Research Participation System (see Appendix 5.5) so that young adult students could sign up to gain course credit. Data collection took place individually in a research room, where participants were given an information sheet to read (see Appendix 5.6) which provided detailed information about the study and what they would be required to do. If, after reading the information sheet, young adults were happy to continue, they signed a consent form (see Appendix 3.7). All instructions were given on the computer programme. After the Attitudinal Literacy Scale was completed on an online survey platform, the experimental procedure followed was exactly the same as for Study 1 and Study 2. Upon completion participants were thanked for their participation and were given the opportunity to ask questions, they were then given a debrief form to read and take away (see Appendix 3.8).

5.3 Results

Explicit preferences

Four participants were omitted from the analysis as they did not complete the Advertising Literacy Scale. The mean initial preference ratings for selected items across the whole sample are shown in Table 7. This table highlights that whilst both the Explicit Non-Celebrity Evaluation score and the Explicit Initial Brand Evaluation score both received average ratings showing no particular like or dislike, the Explicit Celebrity Evaluation score shows a higher preference for the celebrities used in the study.

Table 5.1 Study 3: Young adult (n = 68) mean and SD initial Explicit Preference Ratings prior to pairing for selected celebrities, non-celebrities and novel brands (Min 1 – Max 9).

	Mean	SD
Explicit Celebrity Evaluation	8.04	1.08
score		
Explicit Non-Celebrity	4.97	.13
Evaluation score		
Frontisk Likisl Doord Frontisks	5 12	40
Explicit Initial Brand Evaluation score	5.12	.49
SCOIC		

Explicit Paired Brand Preference score and Explicit Brand Preference Change score are shown in Table 5.2.

Table 5.2 Study 3: Mean (SD) post-pairing Explicit Brand Preference score (Min 1 - Max 9) for brands paired with celebrities and non-celebrities (n = 68).

	Explicit Brand Preference score	Explicit Brand Preference change score
Brands paired with liked celebrities	5.62 (1.05)	+.50 (.96)
Brands paired with neutral non-celebrities	5.04 (.68)	08 (.56)

Explicit preference ratings for real brands were compared after pairing with celebrities and non-celebrities. A paired samples t-test showed that, again, there was not a strong positive response for either set of pairings but there was a significant explicit preference for celebrity paired brands: t(67) = 3.834, p < .001, d = .19.

Mean brand preference change was assessed using two t-tests which compared mean preference scores for real brands before and after pairing with celebrities, and before and after pairing with non-celebrities. Preference for real brands was significantly higher after pairing with celebrities (t[67] = 4.288, p < .001, d = .22) but there was no significant difference in preference after pairing with non-celebrities (t[67] = 1.133, p = .261). Even for

real brands, therefore, no resistance to the celebrity effect was seen in the explicit brand preferences of the young adults.

Brand choices

Looking at first choices only, 69% of young adults chose a celebrity brand as their first choice and 25 % of young adults chose a non-celebrity brand. Scoring followed the same method as in Study 1 and 2. Looking at the first three choices; the mean brand choice score was 1.40 (SD = 3.13) one sample t(67) = 3.665, p < .001, representing a preference to choose celebrity brands.

Brand preference evaluation

As in Study 1 and 2, the frequency of codings for the justifications given by young adults were recorded, using the same five categories as Study 1 and 2: ('celebrity influence', 'unfamiliar brands', 'visual appearance of brand', 'don't know', 'no answer'). 51% of young adults stated that their explicit brand preference was due to celebrity influence — a similar finding to Study 1 where celebrity influence was rated as the main reason for brand selection.

Implicit preferences

In terms of implicit responses, once again we saw the expected strong implicit preference for the celebrity-paired brands (D = 0.74) one sample t(67) = 8.362, p < .001. This is a finding consistent with Study 1 (D = 0.77) and Study 2 (D = 0.79).

Advertising literacy

In analysing responses to the adapted Advertising Literacy Scale, mean scores for each component of the aALS are shown in Table 9. As expected, mean scores for each of the components was relatively high suggesting a good level of advertising literacy amongst the young adult participants.

Table 5.3 Study 3: Young adult (n = 68) mean Conceptual and Advertising Literacy scores by component.

Component	Mean Score (SD)
Conceptual Advertising Literacy	2.99 (.17)
Recognition of Advertising (3 items: Min 1 – Max 4)	3.50 (.37)
Recognition of Advertising's Source (1 item: Min 0 – Max 1)	.91 (.29)
Perception of Intended Audience (3 items: Min 0 – Max 2)	1.77 (.34)
Understanding Persuasive Intent (3 items: Min 1 – Max 4)	3.65 (.38)
Understanding Persuasive Tactics (4 items: Min 1 –Max 4)	3.55 (.30)
Attitudinal Advertising Literacy	2.91 (.41)
Understanding Advertising's Bias (1 item: Min 1 – Max 4)	3.06 (.49)
Scepticism towards Advertising (3 items: Min 1 – Max 4)	2.95 (.47)
Disliking Advertising (3 items: Min 1 – Max 4)	2.82 (.59)

The procedure used by Rozendaal, Opree et al. (2016) was adopted by using the standardised mean item scores to run the reliability analysis for each subscale. For the 14 items comprising the adapted version of the Conceptual Literacy Subscale Cronbach's Alpha (.37) was poor, probably reflecting the changes made to the original scale to facilitate its use with adults. Because of the poor reliability, the data generated by this subscale was omitted from further analysis. For the six-item Attitudinal Advertising Literacy Subscale, however, Cronbach's Alpha (.67) reached an acceptable level (Nunnally & Bernstein, 1994).

The mean attitudinal literacy score for the sample was 2.91 but scores ranged from 1.83 to 3.83, so there was some individual variation in the level of scepticism shown by participants. To assess whether there was any relationship between participants' general attitude to advertising and their explicit and implicit preference for celebrity-paired brands, participants' mean attitudinal literacy scores were correlated with their responses to each of the five measures: Celebrity-Paired Explicit Brand Preference score, Non-Celebrity-Paired Explicit Brand Preference change score, Non-Celebrity-Paired Explicit Brand Preference change score, Non-Celebrity-Paired Explicit Brand Preference score and Attitudinal Advertising Literacy score. The results of the correlation are shown in Table 5.4.

Table 5.4 Study 3: Correlations between Celebrity-Paired Explicit Brand Preference score, Non-Celebrity-Paired Explicit Brand Preference score, Celebrity-Paired Explicit Brand Preference change score, Non-Celebrity-Paired Explicit Brand Preference change score, Implicit Preference score and Attitudinal Advertising Literacy score (n = 68).

	1	2	3	4	5	6
1. Celebrity-Paired Explicit Brand Preference score	-					
2. Non-Celebrity-Paired Explicit Brand Preference score	.014	-				
3. Celebrity-Paired Explicit Brand Preference <i>change</i> score	.885**	280*	-			
4. Non-Celebrity-Paired Explicit Brand Preference <i>change</i> score	333**	.706**	278*	-		
5. Implicit Preference score	.074	.030	091	257	-	
6. Attitudinal Advertising Literacy score	262*	038	208	.086	241*	-

^{**} Significant at p < .01

There was no correlation between Attitudinal Advertising Literacy score and Non-Celebrity-Paired Explicit Brand Preference score or Celebrity and Non-Celebrity Explicit Brand change scores. However, there was a significant negative correlation between Attitudinal Advertising Literacy and both Celebrity-Paired Explicit Brand preference score and Implicit Brand Preference score. Participants who scored higher on the Attitudinal Literacy Subscale (indicating higher scepticism about ads) tended to have lower explicit celebrity brand preferences (r = -.262, p < 0.05) and lower implicit brand preference for celebrity brands (r = -.241, p < 0.05).

To explore the relationship between scepticism only and brand attitudes/choice, assessing understanding of bias and general liking of advertising were omitted for the next analysis. The results of the correlation between Celebrity-Paired Explicit Brand Preference score, Non-Celebrity-Paired Explicit Brand Preference score, Celebrity-Paired Explicit Brand

^{*} Significant at p < .05

Preference change score, Non-Celebrity-Paired Explicit Brand Preference change score, Implicit Preference score and Scepticism can be seen in the following table.

Table 5.5 Study 3: Correlations between Celebrity-Paired Explicit Brand Preference score, Non-Celebrity-Paired Explicit Brand Preference score, Celebrity-Paired Explicit Brand Preference change score, Non-Celebrity-Paired Explicit Brand Preference change score, Implicit Preference score and Scepticism score (n = 68).

	1	2	3	4	5	6
1. Celebrity-Paired Explicit Brand Preference score	-					
2. Non-Celebrity-Paired Explicit Brand Preference score	.014	-				
3. Celebrity-Paired Explicit Brand Preference <i>change</i> score	.885**	280*	-			
4. Non-Celebrity-Paired Explicit Brand Preference <i>change</i> score	333**	.706**	278*	-		
5. Implicit Preference score	.074	.030	091	257	-	
6. Scepticism score	236*	017	189	.095	009	-

^{**} Significant at p < .01

Correlations using the Scepticism measure only (rather than overall Attitudinal Ad Liking score) also generated a negative correlation between Celebrity-Paired Explicit Brand Preference score and Scepticism (r = -.236, p = .05). However, the correlation seen between Attitudinal Ad Liking and Implicit Brand Preference was no longer present (r = -.009, p > .05). These results indicate that overall attitudinal ad literacy is related to both explicit (propositional) and implicit (associational) brand preference, yet scepticism more specifically is only related to explicit, propositional brand preference.

^{*} Significant at p < .05

5.4 Discussion

As in Studies 1 and 2, despite presenting participants with real brands, the findings of this study again failed to see young adults resisting the influence of well-liked celebrities in their explicit and implicit brand evaluations and their overt brand choices. General attitude to advertising was a little lower overall than might have been expected from a sample of young adults, but there was some indication that the relationship between attitudinal advertising literacy and resistance to advertising previously seen in children's explicit responses (Rozendaal, Lapierre et al., 2011) was also present in the explicit responses of young adults to existing brands when they were paired with well-liked celebrities. Furthermore, there was evidence to suggest that, in this sample, higher attitudinal advertising literacy was also related to less positive explicit and implicit responses to the brands. This may be the first time that such a link has been identified between attitudinal advertising literacy and implicit responses to brands, and further reinforces the view that attitudinal advertising literacy may be an important factor in moderating the effects of advertising. When looking at the scepticism component of the attitudinal scale alone, the relationship between scepticism and implicit responses failed to emerge, yet increased scepticism remained negatively related to explicit preference for celebrity paired brands.

The three studies presented so far have provided new insights into the effect of wellliked celebrities on brand preferences, by demonstrating that both explicit and implicit judgments are influenced by the pairing of well-liked celebrities and brands. Based upon previous research (e.g. Forehand & Perkins, 2005), it was assumed at the outset that, where individuals possess a strong liking for celebrities', resistance might be seen in explicit responses to brands where participants were able to consciously reflect upon the presence of the celebrity image as an attempt to manipulate their brand judgment. In all three studies, however, simple pairing with a well-liked celebrity was enough to bias participants' brand evaluations (both explicit and implicit), and their brand choices towards brands paired with a celebrity that they liked. In their recent review of research on celebrity endorsement, Bergkvist and Zhou (2016) point to mixed findings from studies looking into the effects of well-liked celebrities, with both positive, neutral and even negative effects being reported from the limited range of studies carried out. However, the results from the studies presented here is clear: for both novel and existing brands, in the absence of any overt endorsement, simple pairing of a well-liked celebrity with a brand led to more positive explicit evaluations of the brand and greater likelihood of brand choice. Furthermore, brand evaluations became more positive after pairing with a liked celebrity. For similarly rated brands, those paired with celebrities were preferred to those paired with non-celebrities; and even for novel brands that they had previously rated neutrally, an overwhelming number of participants chose celebrity-paired brands as their favourite brand. In all three studies there was also an implicit preference for the celebrity-paired brands which supports the findings of Forehand and Perkins' (2005) view that the implicit effects of celebrity advertising are difficult to overcome.

These studies did not provide evidence of the resistance to the celebrity effect, which was apparent in the explicit responses of participants in Forehand and Perkins' (2005) study. In their study participants were played audio recordings of celebrity voiceovers in real radio

ads and it was the brand evaluations of the participants who recognised the celebrity which tended to become less positive. It is possible that in Forehand and Perkins' study, the fact that the identity of the celebrity was disguised could have triggered a sense of being manipulated in these participants which then led to resistance. In contrast to Forehand and Perkins, in the studies reported here the visual presentation of celebrities paired with brands meant that the identity of the celebrity was immediately apparent to participants. Importantly, for each participant the celebrities paired with brands were also those that they had identified as being well-liked.

Rozendaal, Bujis et al. (2016) claimed that negative emotions stemming from recognition of manipulation might lead to resistance. In this study, however, there was no hidden manipulation for participants to detect and visual presentation of the liked celebrity alongside a brand was enough to bring about more positive evaluations of the brand. It could be that the general effect of associating well-liked celebrities with brands is to create positive explicit and implicit evaluations of the brand (as, presumably, is assumed by those employing celebrity endorsement as a marketing strategy). An exception to this could be where consumers feel directly that they are being manipulated in some way, which then sets in motion a resistance response. Some evidence for this can be found in research looking at product placement which, at least notionally, involves covert advertising. Gibson et al. (2014) found that for brands presented covertly in a popular TV show, when participants recalled seeing the brand they tended to report positive explicit brand attitudes. However, when participants were primed to expect persuasion to occur, those who recalled the brand reported more negative explicit brand attitudes. These researchers explain their results in terms of the propositional reasoning engaged in by participants who were alerted to the manipulation attempt which led them to provide more negative responses.

While recognising a manipulation attempt and consciously reflecting upon it may be one route to resisting the celebrity effect which is dependent upon aspects of the specific context in which the ad is presented, the results from Study 3 also suggest an alternative, attitudinal, basis for resistance. The relationship identified between higher attitudinal advertising literacy and lower explicit brand preferences has been seen previously in research assessing the relationship between ad literacy and explicit responses to advertising in both children (Rozendaal, Opree et al., 2016) and adults (Obermiller & Spangenberg, 1998; Obermiller et al., 2005). One explanation for this would be that increased advertising literacy leads to defensive reasoning when individuals are exposed to advertising. This is supported by the finding that, for individuals demonstrating high advertising scepticism, advertising with greater informational content is less persuasive than advertising based on an emotional appeal (Obermiller et al., 2005). Notably, however, in Study 3 a similar relationship between attitude to ads and implicit responses to the brands paired with well-liked celebrities was identified; higher attitudinal advertising literacy was related to lower implicit preference for the celebrity brands. This suggests that there is also a relationship between advertising literacy and individuals' affective responses to advertising. Interestingly, this finding does not remain when looking at scepticism more specifically – the significant correlation found between attitudinal ad literacy and implicit scores did not remain, suggesting that whilst overall attitude to ads is related to both explicit (propositional) and implicit (associational)

brand preference, scepticism more specifically is only related to explicit, propositional brand preference. Moving forward, looking at general attitudinal advertising literacy and scepticism as separate entities would be beneficial. This is something which is returned to later in the thesis.

Gawronski and Bodenhausen (2011) proposed that the (positive or negative) valence of implicit associations previously stored in memory influence the affective responses to a specific target item. If the overall affective response felt by an individual towards advertising is negative, then this 'gut reaction' to advertising will determine their implicit responses and could influence their explicit propositional judgments. An exception to this could occur, for example, where feelings of scepticism are overriden by strong positive feelings initiated by powerful emotional content included in an ad (Obermiller et al., 2005). More research is needed to investigate the relationship between advertising scepticism and explicit and implicit responses to advertising and to examine the relationship between propositional and affective responses to advertising in different advertising contexts.

It could be possible that adults don't attend to or even explicitly recognise advertisements as much as initially thought, since technological advances of advertising mean that we are increasingly surrounded by advertising in a wide variety of contexts. If we are constantly surrounded by advertising, with some of it being unattended, is it plausible that we can always be on guard against any unwanted effects? Heath (2012) suggested that when consumers are able to critically evaluate advertisements their ability to consciously reflect can actually alert them to recognise manipulation, thus affecting their explicit brand preferences. Furthermore, he proposed that "switching off" to advertising could actually be a key route to persuasion as cognitive defences are lowered and the implicit effects of advertising are difficult, or even impossible, to overcome. However, the findings of Study 3 oppose this view and is the first research to the author's knowledge to demonstrate that implicit defences against the celebrity effect can be maintained which could suggest that attitudinal advertising literacy may be able to help. These novel findings provide a clear direction for future work into advertising literacy and are relevant, for example, to schoolbased advertising literacy initiatives which often focus on developing children's conceptual understanding of advertising, whereas these results suggest the importance of emphasising attitudinal literacy.

In conclusion, the results of the three studies reported so far have clearly demonstrated that pairing well-liked celebrities with brands can have a robust positive effect upon both explicit and implicit brand evaluations. There was little evidence to suggest that young adults consciously resisted the effects of celebrity pairing in their explicit judgments, however there was evidence indicating that a high level of attitudinal advertising literacy and scepticism acts upon the explicit effects of celebrity on brand judgments, but that attitudinal advertising literacy also moderates implicit effects. Study 4 explores further why no resistance to the celebrity effect — even in explicit judgments - has been found so far. In the discussion of Study 2 it was suggested that using well-liked celebrities might be leading to any scepticism being overridden by liking to the celebrity, even in participants explicit brand judgments. Therefore, a new method to increase the feeling of manipulation (a more realistic

ad situation) and a situation where the positive attitudes to celebrity is reduced (by using 'known' rather than liked celebrities) was devised for Study 4.

6 Study 4

6.1 Introduction

One aim of Study 4 was to further explore the role of scepticism in young adults' brand preferences. The literature most relevant to this chapter can be seen in section 1.3, where an examination of research into scepticism is offered. Literature suggests that having high levels of advertising literacy (or media literacy) is one way in which prevention of negative advertising effects can be used to protect consumers from the explicit effects of advertising campaigns (Büttner et al., 2014). Furthermore, literature concerning celebrity advertising is presented in section 1.4 which discusses the considered benefits for advertisers when celebrities are used in their advertising campaigns. Another aim of Study 4 was to examine the effect of celebrity advertising when the celebrity is known but not necessarily well-liked. Studies 1 to 3 have shown that the effect of well-liked celebrities is difficult to overcome (both explicitly and implicitly) even when participants demonstrate a relatively high level of scepticism towards advertising. However, only presenting participants with well-liked celebrities is not representative of how we, as consumers, typically experience advertising campaigns – for the most part we experience adverts which contain celebrities that we know but may have no particular liking for. Therefore, Study 4 moves away from using well-liked celebrities and instead utilises celebrities which participants should recognise but may not necessarily rate highly.

Studies 1 to 3 have consistently shown that young adults, when presented with brands with well-liked celebrities, have an explicit and implicit preference for these brands over and above brands presented with non-celebrities. It had been expected that young adults would show resistance to the effects of celebrity in their explicit judgments and consequently have a preference for brands paired with non-celebrities. This was not found in any of the previous studies, which led to the conclusion that how the brands were presented failed to trigger the feeling of manipulation from which resistance would likely have arisen. The implicit effect consistently matched that of previous research (e.g. Forehand & Perkins, 2005), and therefore this study moves towards examining the explicit effect only. The IAT method was consequently not used in this study. Study 3 found that when there was a positive affective response (e.g. to a well-liked celebrity), even though attitudinal advertising literacy was high, brand choice, explicit and implicit responses were more negative. However, when correlating scepticism more specifically, rather than advertising literacy, there was no relationship with implicit responses and only the negative relationship with explicit responses remained. This highlights the importance of examining scepticism and explicit preferences in more depth.

Studies 1 to 3 failed to find resistance to celebrity advertising in explicit judgments, in both children and young adults, even though dual process models based on Forehand and Perkins (2005) predict that explicit and implicit responses could be different. This could have been because of how the brands were paired which consequently failed to make participants feel manipulated. Therefore, Study 4 included a new format of pairing to represent a typical advertising scenario. Ten different brand logos, that were created in a format typically presented on advertising boards used as a backdrop for celebrity interviews, and photographs

of these brands, were shown to participants either with or without a celebrity. A measure of scepticism only (rather than attitudinal ad literacy) was included in this study, to extend the findings of Study 3, which found that scepticism to advertising was only correlated with explicit preference for celebrity brands, yet not implicit preference. Scepticism towards ads was measured both before and after testing to explore whether baseline scepticism to advertising matches that of scepticism directly after being presented with an advertising campaign. It seems plausible that scepticism to ads could increase upon presentation of adverts, and therefore both pre- and post-testing was conducted.

Young adults were presented with printed questionnaires which measured advertising scepticism both pre- and post- brand testing, as well as explicit preference for brands presented either alone or with known celebrities. The brands selected were common brands, familiar to UK students, yet not market leaders within their field. Participants' explicit preferences for the brands were recorded along with their justifications for their explicit judgments. Their brand choice was also recorded. A key interest here was whether simply pairing known celebrities with brands, in the format often seen on TV and other media, would trigger explicit preferences for celebrity-paired brands or whether adult participants would show resistance to the effects of celebrity. It was hypothesized that brands presented with celebrities, in a more realistic advertising scenario, would trigger feelings of manipulation in the young adults and thus resistance to celebrity paired brands would be shown. It was further predicted that high levels of scepticism to advertising would be related to lower explicit celebrity brand preference.

6.2 Method

6.2.1 Participants

86 young adults (72 female) from a UK University with a mean age of 19.55 years (SD = 4.40) took part in this study in return for credit towards research participation requirements for their course award. The data for two participants was removed as they failed to complete both (pre- and post-test) Scepticism scales, meaning a total sample of 84 participants (70 female) were included in the final analysis.

6.2.2 Materials

All participants were presented with a printed questionnaire which contained four sections. The first and fourth sections tested young adults' scepticism pre- and post- presentation of brands using a scale adapted from Obermiller and Spangenberg's (1998) Advertising Scepticism (SKEP) Scale. The SKEP scale is a nine-item scale (α =.85) designed to measure general scepticism towards advertising with the items tapping into consumer opinions about the aims, honesty, truthfulness and accuracy of advertising. This scale was adapted to make the language and terminology more appropriate for young adults – for example, "advertising is a reliable source of information about the quality and performance of products" was replaced with "I can rely on the information given in adverts". One item was removed

("advertising is a truth well told") as it was considered to be an ambiguous statement. The scepticism scale therefore consisted of eight statements (see Appendix 6.1) which tested scepticism towards advertising and were all responded to on a four-point scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. The decision to remove the "neither agree nor disagree" response was taken as studies show that the inclusion of a neutral or "no opinion" option significantly increases the number of people stating they have no opinion when they actually do (Bishop, 1987). Single mean scepticism scores before and after testing (high scores representing high scepticism) were calculated for each participant.

The second section of the questionnaire presented participants with 10 images of brands presented on advertising boards typically used as a backdrop for celebrity interviews and photographs (see Appendix 6.2). The brands selected were common brands, familiar to UK students, yet not market leaders within their field. For each participant, five of the images were presented as brands on ad boards only, and in the other five the ad boards were presented with a known celebrity in front of them. The order of presentation was counterbalanced, so that each brand was at some point presented alone and with each of the five celebrities. Unlike Studies 1 to 3, the celebrities selected were not measured as being "well-liked" but instead were selected on the basis that they were likely to be known. Each coloured image (brand alone or brand with celebrity) was presented separately on a page and measured 3.5" x 2" and preceded a question "How much do you like this brand?" (Explicit Brand Preference) to which participants could respond on a scale from "0 - Not at All" to "10 - Very much". The third section of the questionnaire presented all 10 brand images on a page and asked participants to choose their favourite three brands and to give the reasons for their selections (Brand Choice).

6.2.3 Procedure

Ethical approval was gained from the university ethics committee (see Appendix 6.3). Following the development of materials, participants were recruited – this involved advertising the study on the university's Research Participation System (see Appendix 6.4) so that young adult students could sign up to gain course credit. Data collection took place in a large research room in groups of eight to 10 people. The room was large enough to allow only one participant to be sat on each row of four to ensure that participants were working independently. Participants were each given an information sheet to read (see Appendix 6.5) which detailed information of the study and what they would be required to do. If, after reading the information sheet, young adults were happy to continue, they signed a consent form (see Appendix 3.7) and were given the printed questionnaire to complete. Participants were asked to remain silent and in their seats until everybody had completed their questionnaires, to ensure no disruption. The researcher stood at the back of the room to prevent any late comers entering the room and disrupting the other participants. Upon completion, participants were thanked for their participation and were given the opportunity to ask questions, they were then given a debrief form to read and take away (see Appendix 6.6).

6.3 Results

Brand preferences

Results showed that these young adults had a significantly higher explicit preference for brands presented alone (M = 5.19, SD = 1.09) than brands presented with a celebrity (M = 4.69, SD = 1.32), t(84) = 3.33, p = .001, d = 0.41. This suggests that experiencing a brand paired with a known rather than a well-liked celebrity in a more true-to-life presentation led participants to resist the celebrity effect.

Brand choice

Participants were asked to select their three favourite brands from the 10 previously shown to them. Looking at first choices only, 56% of young adults selected a brand that they had seen previously presented alone in the ad presentation part of the study. In order to produce a Celebrity Brand Choice score, a score of one was given for each of the three favourite brands selected that had been presented with a celebrity, and a score of zero for chosen brands that had been presented alone. When looking at the three favourite brands selected by participants, the average Celebrity Brand Choice score (with three being the max) was 1.38 (SD = .74). A single sample t-test demonstrated that this score was not significantly different to what would be expected by chance t(83) = -1.469, p > .05.

Scepticism

In analysing responses to the adapted Scepticism Scale the items were used to run the reliability analysis for each presentation of the scale, both before and after presenting the brands. For the eight items comprising the Scepticism Scale the Cronbach's Alpha (.76 before, .80 after) reached an acceptable level (Nunnally & Bernstein, 1994). Mean scepticism scores were calculated and t-test analysis showed that there was no significant difference between scepticism scores before (M = 2.51, SD = .33) and after (M = 2.53, SD = .35) testing, t(84) = 1.24, p > .05, d = 0.06. To assess whether there was any relationship between responses to the scepticism scales and explicit brand preferences, participants' mean Scepticism Before and Scepticism After scores were correlated with their responses to each of the brand preference measures: Brand Choice, Brand Alone preference and Celebrity Brand preference. The results of the correlation are shown in Table 6.1.

Table 6.1 Study 4: Correlations between Brand Alone Preference, Celebrity Brand Preference, Brand Choice, Scepticism Before and Scepticism After (n = 84).

	1.	2.	3.	4.	5.
1. Brand Alone Preference	-				
2. Celebrity Brand Preference	.374**	-			
3. Brand Choice	187	.291**	-		
4. Scepticism Before testing	085	221*	020	-	
5. Scepticism After testing	058	248*	021	.841**	-

^{**} Significant at p < .01

Correlational analysis showed a significant strong positive correlation between Scepticism Before and Scepticism After testing (r = .841, p < .001) which was to be expected. There was also a significant, positive correlation between Explicit Brand Alone Preference and Explicit Celebrity Brand Preference (r = .374, p < .001). More importantly, there were significant negative correlations between preference for Explicit Celebrity Brands and Scepticism Before (r = -.221, p < .05) and Scepticism After (r = -.248, p < .05) testing, highlighting that participants who scored higher on the scepticism scale before and after brand presentation had lower explicit preferences for brands presented with celebrities. Interestingly there was no significant correlation between scepticism scores and brand preference scores when brands were presented alone.

6.4 Discussion

In Study 4, the strong celebrity effect that had consistently been seen across three previous studies was not seen when the brands were paired with 'known' rather than well-liked celebrities. This could indicate that in Study 4 for the first time young adults were demonstrating resistance to the celebrity effect. Despite this, even for known celebrities, an effect of scepticism similar to that seen in Study 3 occurred. Regardless of the fact that brand alone was preferred overall, within the sample the participants who scored higher for scepticism were also more likely to score celebrity brands lower. Higher scepticism (both before and after testing) was associated with lower preference for brands paired with known celebrities but the same relationship was not found for brands presented alone. In Study 3 the association was present when celebrities were paired with brands but not when there was a non-celebrity presented with the brand. Taken together these findings suggest that the

^{*} Significant at p < .05

presence of the celebrity was important in influencing the responses of individuals with higher levels of ad scepticism. This result is entirely in line with the correlational result in Study 3 which highlighted that higher scepticism was related with lower celebrity brand scores.

Research suggests that the presence of a celebrity endorser in advertisements can overshadow (or "eclipse") the brand (Ilicic & Webster, 2014). Where this happens, and the consumer has a strong attachment to the celebrity, then their positive attitudes to the celebrity transfer onto the brand, enhancing their brand attitude - so eclipsing leads to a particular result when the celebrity is well-liked. This is a finding which could explain the findings that have been replicated in Studies 1 to 3 when each experiment was tailored to use only celebrities that were well liked to the participant. However, in Study 4 the research moved away from using celebrities that the participants had already rated as being well-liked, to present all young adults with the same celebrities, and the eclipsing effect disappeared. Across all of the studies reported thus far, the findings support the findings of Ilicic and Webster (2014) which suggest that a positive affective response to celebrities can override individuals' cognitive defences regardless of whether they are aware of the persuasive intent of using celebrities in the ads to create a positive response to brands.

In Studies 1 to 3 it was found that the simple pairing of a brand with a well-liked celebrity was enough to bias participants' brand evaluations (both explicit and implicit) and brand choices in favour of brands paired with a celebrity that they liked. Study 4 moved away from presenting participants only with celebrities for whom they have a strong liking as, in reality, we are not only exposed to adverts that contain celebrities we like. It was expected that the presence of a celebrity with the brand would trigger cognitive defences within individuals which would enable them to guard against the intended persuasive nature of the celebrity figure. These results are therefore in line with this prediction and also fit with the suggestion that celebrities in ads do trigger cognitive defences in young adults, but when the celebrities are well-liked these defences are overridden.

Two things need to be considered when discussing this finding. Firstly, it may be that the young adults here were searching for a reason to reject the brand when it was paired with a celebrity. Kunda (1990) found that individuals often search for a reason to reject the claims of advertisements, with those not wanting to believe the claim (i.e. those with high levels of scepticism) calling upon beliefs that can be used to question the nature of the advert. Friedstad and Wright (1994) highlight the importance of recognising the intended persuasive tactic within an advert. It may be that the 'tactic' of including a celebrity in an ad should make it easier to recognise an ad event but, even so, positive feelings for a celebrity may neutralise the recognition of manipulation and overrides defences. If the intended tactic is not immediately evident then one is less likely to trigger scepticism and could unknowingly welcome a persuasion attempt, which may offer an explanation as to why the young adults in this study preferred brands that were presented alone. It's important to note, however, that young adults did show lower preferences when presented with celebrities, but overall brand preference in this study was not high (five out of 10). It may not be so much that they were defending themselves against the effect of celebrity pairings, but more to do with them missing the tactic of brands presented alone which explains why a) brands presented alone

were preferred more than celebrity paired brands and, b) why the negative relationship between scepticism and brands is only found when brands are paired with celebrities.

Previous research (e.g. Rozendaal, Buijzen et al., 2011) has shown that the ability to recognise the intended tactics of advertisements varies by age, with eight-year-olds recognising some tactics of an advert much less accurately than older children and adults. The presentation of brands in this study depicted a more accurate representation of how ads are typically presented in everyday life. Therefore, it is more likely to have triggered recognition of being manipulated which enabled resistance to the celebrity paired brands. Therefore, in terms of triggering resistance, the change in procedure in this study seems to have worked. The current research explored the effects of celebrity advertising as it seems to be one tactic that children understand reasonably well. Due to the findings from Rozendaal, Buijzen et al.'s study (2011) where even eight-year-olds were able to identify the intentions of ads using celebrity endorsement, Hudders et al. (2016) stated that celebrity endorsement is not a tactic to which children are vulnerable. If eight-year-olds understand about celebrity endorsers, then we would expect to see them prefer brands presented alone, over and above brands presented with a known celebrity. This does not fit with previous assumptions about children's vulnerability to ads derived from the work of Piaget (see section 1.2.1). Based on this earlier work it would be questionable whether ad literacy in young children is sufficiently developed to trigger scepticism. It is important, therefore, to explore whether the scepticism findings from Study 4 are as seen in a child sample, more specifically whether an association between high scepticism and low celebrity paired brand preference is observed. A finding matching that of the young adult sample would suggest that both children and adults are processing these ads in a similar way which, seems unlikely given the earlier research. Examining this was one of the aims of Study 5.

7 Study 5

7.1 Introduction

This chapter builds upon the results from the young adults in Study 4, to explore whether the same findings are evident in children aged eight- to 14-years. Earlier studies reported in this thesis (Studies 1 to 3) consistently highlighted that young adults have both an explicit and implicit preference for brands paired with celebrities for whom they have a strong liking – any attempt to use advertising literacy skills to defend against the celebrity influence seems to be overridden by their response to celebrities they like. In contrast, Study 4 found that when the celebrity is known as opposed to well-liked (which is more representative of everyday advertising), this effect disappears in young adults, with participants demonstrating an explicit preference for brands presented alone, as opposed to brands presented with known celebrities. Study 4 also demonstrated that young adults who scored higher on the scepticism scale before and after brand presentation had lower explicit preferences for brands presented with celebrities. Interestingly there was no significant correlation between scepticism scores and brand preference scores when brands were presented alone. This suggests that young adults with higher levels of scepticism can utilise advertising literacy skills to defend themselves against the persuasive intent of a celebrity paired brands when a known celebrity is featured (as opposed to a well-liked celebrity) and that the presence of a celebrity appears to trigger a negative response in those with higher ad scepticism.

The results from Study 1, which included a small group of 10-year-olds, suggested that children of this age also have an explicit preference for brands paired with well-liked celebrities over brands paired with non-celebrities. As with the adults, this could be explained in terms of their cognitive defences being overridden by a strong liking for the celebrities. On the other hand, it could be that advertising literacy skills are associated with cognitive development which occurs during later childhood, and it is not until the age of around 12- to 14-years that children respond to the celebrity effect in the same way as young adults. Therefore, an alternative account of the responses of the 10-year-olds in Study 1 would be that concerns about being manipulated by the celebrity were not overridden by their liking for the celebrities. It could be that they simply did not recognize the manipulation attempt because children of this age are easily persuaded by this form of advertising, highlighting a lack of advertising literacy.

As described earlier in the thesis, the literature around advertising literacy has traditionally relied strongly upon Piaget's stage theory of cognitive development which describes how children become increasingly able to reason about the world, from coordinating 'simple' motor skills in infancy to utilising higher-level reflective judgments in adulthood. Based upon this account of development, it has been suggested that with age most children will develop cognitive reasoning skills that will allow them to understand the nature of advertising and guard against any unwanted influence. For example, according to Piaget (1932) younger children are not good at picking up ambiguities, they are less able to deal with complexity, and they are not good at taking the perspective of another person. Friedstad and Wright's (1994) Persuasion Knowledge Model (PKM) suggests that, compared with

older children and adults, younger children will find it difficult to appreciate the information contained in advertising and to recognise that advertisers present information from the perspective of their clients in seeking to persuade the recipient and influence their behaviour. From this perspective, therefore, it is not until children reach adolescence (12-years and onwards) that children would be fully able to understand persuasive intent inherent to advertising, and grasp that there are complexities and ambiguities in messages displayed through media.

More recent research has suggested children younger than 12-years do have some understanding of how advertising works. Rozendaal, Buijzen et al. (2011) conducted research into children's understanding of advertising by asking them to match the intended effect of the advertisement with different tactics that advertisers chose to employ. They suggest that the age at which children in the Netherlands reach an adult level of understanding of advertising varies by tactic, with even eight-year-olds in their sample understanding the intention of celebrity endorsement being to get them to like the product. If the tactic of celebrity endorsement is an easy tactic for children to recognise, then it may be that children, like adults, can defend themselves against the intended manipulation of the celebrity paired brands.

Whilst Rozendaal, Buijzen et al. (2011) report that eight-year-olds have a good understanding of celebrity endorsement, the Persuasion Knowledge Model (Friedstad & Wright, 1994) indicates that it is likely that the younger age groups (aged eight and 10-years) may not yet have the cognitive skills and knowledge of advertising to defend themselves against celebrity advertising. In other words, they may recognise advertisers' intentions but still not defend themselves in their explicit responses to ads. One of the aims of Study 5, therefore, was to explore children's levels of scepticism to advertising and to examine whether any relationships between scepticism and explicit preferences emerge. Considering the developmental work of Piaget alongside the work of Friedstad and Wright and the PKM, we would expect to find the younger children to be less sceptical of advertising than the older age groups when presented with brands paired with known (as opposed to well-liked) celebrities. This might lead eight-year-olds to prefer celebrity brands more than older children, with this preference also being evident in their final brand choice.

7.2 Method

7.2.1 Participants

271 children took part in this study, although only 216 children (102 female) were included in the subsequent analysis. Any child who failed to complete all tasks in full was left out of the analysis. In order to be able to specify clear age groups only children whose age fell into one of the following age categories were included in the study: eight-year-olds (seven years 8 months to 9:4); 10-year-olds (9:8 to 11:4); 12-year-olds (11:8 to 13:4); 14-year-olds (13:8 to 15:4). The final sample consisted of 45 children (28 female) in the eight-year-old group (mean age = 7.97, SD = .45), 76 children (46 female) aged 10-years-old (mean age = 10.18,

SD = .61), 42 children (16 female) aged 12-years-old (mean age = 11.92, SD = .34), and 53 children (23 female) aged 14-years-old (mean age = 13.98, SD = .25).

7.2.2 Materials

All children were presented with the same printed questionnaire as used in Study 4. As before it contained four sections. The first and fourth sections tested children's advertising scepticism pre- and post- presentation of brands using a scale adapted from Obermiller and Spangenberg's (1998) Advertising Scepticism Scale. The readability score of this scale was improved (before = 12-years-old, after = eight-years-old, Flesch-Kincaid readability test) to make the scale more appropriate for the younger of our age groups. As in Study 4 the scale consisted of eight statements (see Appendix 6.1) which tested scepticism towards advertising on a 4-point scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Single mean scepticism scores (high scores representing high scepticism) were calculated for each child before and after testing.

The second section of the questionnaire presented participants with 10 different brands (see Appendix 6.2) that had been created to look like images of brands presented on advertising boards, typically used as a backdrop for celebrity interviews and photographs. The brands selected were common brands familiar to UK children, yet not market leaders within their field. The brands used were the same as those used in Study 4 with the young adults. For each participant five of the images presented the brands on ad boards only and the other five were presented with a known celebrity in front of them. The order of presentation was counterbalanced, so that each brand was at some point presented alone and with each of the five celebrities. As in Study 4, the celebrities used were known, rather than well-liked, and representative of celebrities that might be seen endorsing products. Each coloured image (brand alone or brand with celebrity) was presented separately on a page and measured 3.5" x 2" and preceded a question "How much do you like this brand?" to which participants could respond on a scale from "0 - Not at All" to "10 - Very much". The third section of the questionnaire presented all 10 brand images on a page and asked participants to choose their favourite three brands and to give the reasons for their selections.

7.2.3 Procedure

Ethical approval was gained from the university ethics committee (see Appendix 7.1). Following the development of materials participants were recruited. Headteachers of schools in Stoke-on-Trent and Staffordshire were sent a letter which thoroughly detailed the research requirements and the importance of the research (see Appendix 7.2). Headteachers who expressed an interest in allowing participation from children at their school were subsequently visited to discuss the research further. Agreement to participate was received from two schools, and a thank you gift of £50 book voucher was given to each of these participating schools. Because the study was not considered to be of a nature which would be likely to cause upset with young children, the university's ethical panel deemed it suitable for a Headteacher to consent on behalf of parents. However, a letter was sent home to

parents/guardians of all children eligible to participate which detailed the research aims (see Appendix 7.3). The letter gave contact details of the researcher, as well as that of the researcher's supervisors in case they wanted to discuss the research further

Data collection took place in children's classrooms, on a whole class basis. Children were given the instructions verbally and reminded that although a letter had been sent home participation in the study was voluntary and they could be given an alternative activity to do if they wished. Children who had been opted out by the parents, or those who said they didn't wish to take part in the study were given the task of designing a new poster advert for children's toothpaste. Consent was assumed upon completion of the questionnaires. To ensure that all children understood each question, the researcher read each question aloud, along with the response options and gave time for the children to make their selections. Generally, each child worked through the questionnaire at the same time as the researcher. Upon completion a verbal debrief was given (see Appendix 7.4) and they were thanked for their participation.

7.3 Results

Brand preference

Explicit Celebrity Brand score and Explicit Brand Alone score by age group are shown in Table 7.1.

Table 7.1 Study 5: Means (SD) of Explicit Celebrity Brand Preference and Explicit Brand Alone Preference by age group (Min 0 – Max 10).

	Explicit Celebrity Brand Preference	Explicit Brand Alone Preference
eight-year-olds (n=45)	5.53 (1.99)	6.08 (1.67)
10-year-olds (n=76)	5.27 (1.79)	5.50 (1.82)
12-year-olds (n=42)	4.54 (1.79)	4.81 (1.72)
14-year-olds (n=53)	4.09 (1.96)	4.88 (1.81)

To examine the effects of age and brand presentation type a 4 (age) x 2 (presentation) mixed ANOVA was run with age as the between subject's variable and presentation type as the repeated measure. This showed a significant main effect of presentation type with higher preference for brands presented alone (M = 5.34) than presented with a celebrity (M = 4.90);

F(1,212) = 7.09, p = .008, $\eta p^2 = 0.03$. There was also a significant main effect of age. Regardless of how the brands were presented, preference for brands decreased with age, F(3,212) = 10.46, p < .001, $\eta p^2 = 0.13$. There was no significant interaction between brand preference and age. Literature suggests that as children get older their understanding of advertising and its intent increases (see detail of the Persuasion Knowledge Model (Friedstad & Wright, 1994) and the findings of other studies discussed in section 1.2) and therefore the sample was split into younger (eight- and 10-year-olds) and older (12- and 14-year-olds) children. Post hoc t-tests found that brand preference was lower in the two older age groups (12-year-olds and 14-year-olds, M = 4.57, p = .01) compared to the younger age groups (eight-year-olds and 10-year-olds, M = 5.54, p > .05) suggesting that older children may be less susceptible to advertising which would fit with previous literature, the Piagetian account of development and the Persuasion Knowledge Model (Friedstad & Wright, 1994).

Scepticism

Although this is the first time this scale has been used, there were no differences between age groups in children who completed the scale. In analysing responses to the adapted Scepticism Scale the item scores were used to run the reliability analysis pre- and post-testing. For the eight items comprising the version of the Scepticism Scale adapted for use with children, the Cronbach's Alpha (.74 before, .80 after) reached an acceptable level (Nunnally & Bernstein, 1994). Scepticism Before and Scepticism After scores by age group are shown in Table 7.2.

Table 7.2 Study 5: Means (SD) of Scepticism Before and Scepticism After brand presentation (Min 1 – Max 4)

	Scepticism Before	Scepticism After
eight-year-olds (n=45)	2.19 (.43)	2.20 (.55)
10-year-olds (n=76)	2.43 (.35)	2.48 (.40)
12-year-olds (n=42)	2.46 (.50)	2.53 (.57)
14-year-olds (n=53)	2.47 (.32)	2.47 (.36)

To examine advertising Scepticism Before and Scepticism After presentation by age a 4 (age) x 2 (presentation time: pre- vs. post-) mixed ANOVA was run with age as the between subjects variable and presentation time as the repeated measure. Findings showed a significant main effect of presentation time with scepticism scores higher after testing (M = 2.43) than before testing (M = 2.39), F(1,212) = 4.29, p < 0.05, $\eta p^2 = 0.02$. There was also a significant main effect of age F(3, 212) = 5.24, p = .002, $\eta p^2 = 0.07$ with eight-year-olds (M = 2.20) being less sceptical than the 10-year-olds (M = 2.45), 14-year-olds (M = 2.47) and 12-year-olds (M = 2.50): (all p < .001). However, there was no significant interaction between presentation time and age.

Brand choice

Children were also asked to select their three favourite brands from the 10 previously shown and a score of one was given for each of the brands selected that had been presented with a celebrity (with the maximum score of 3 representing a strong choice of celebrity brands). For the overall sample, looking at first choices only, 59% of children selected a brand that had been previously presented alone in the ad presentation part of the study, again highlighting that the celebrity effect was being resisted. Similarly, when looking at the three favourite brands selected the average brand select score was 1.34 (SD = .92). A single sample t-test showed that this score was significantly lower than what would be expected by chance: t(194) = 2.376, p < .01, and therefore that across the overall sample there was a tendency to choose brands that had been presented alone rather than with a celebrity. A one-way ANOVA showed that there was no difference in brand choice scores by age group (p = .798) nor when comparing younger (eight- and 10-year-olds) and older (12- and 14-year-olds) participants (p = .394).

Correlating scepticism

To assess whether there was any relationship between participants' Scepticism Before and Scepticism After and their explicit preference for brands participants' mean scepticism scores were correlated with Explicit Brand Alone Preference, Explicit Celebrity Brand Preference and Brand Choice. These results can be seen in Table 7.3.

Table 7.3 Study 5: Correlations between Explicit Brand Alone Preference, Explicit Celebrity Brand Preference, Brand Choice, Scepticism Before and Scepticism After (n = 216).

-	1.	2.	3.	4.	5.
1. Explicit Brand Alone Preference	-				
2. Explicit Celebrity Brand Preference	.139*	-			
3. Brand Choice	507**	.386**	-		
4. Scepticism Before	127	226**	53	-	
5. Scepticism After	110	221**	101	.842**	-

^{**} Significant at p < .01

^{*} Significant at p < .05

When looking at the overall correlations with all of the age groups included there was a significant strong correlation between Scepticism Before and Scepticism After testing (r = .842, p < .001) which was to be expected. There was also a significant, positive correlation between Explicit Brand Alone Preference and Explicit Celebrity Brand Preference (r = .139, p < .05). Importantly, as was found with the young adult sample in Study 4, for the eight- to 14-year-olds here there were no significant correlations between Scepticism (Before or After) scores and Explicit Brand Alone Preference but there was a significant negative correlation between preference for Explicit Celebrity Brands and Scepticism scores both Before (r = .226, p = .001) and After testing (r = .221, p = .001). This showed that children who scored higher on the scepticism scale had lower preference for brands presented with celebrities. Furthermore, as seen in Study 4, although there was a significant association between Explicit Brand Alone Preference and Brand Choice (p < .001) there was no relationship between Brand Choice and Scepticism.

Further correlations were carried out to look at the results for individual age groups based on the previous finding that children aged 12-years and older demonstrated a lower overall preference for brands than children in the younger age groups. As expected, for each of the age groups there was a significant, positive correlation between Scepticism Before and After testing: eight-year-olds (r = .758, p < .001); 10-year-olds (r = .824, p < .001); 12-year-olds (r = .905, p < .001) and the 14-year-olds (r = .846, p < .001). Also, in all age groups Explicit Brand Alone Preference was negatively associated with Brand Choice (all p < .05). However, there were some age-related differences. For the two older age groups (12-year-olds and 14-year-olds) there were significant, positive correlations between Explicit Brand Alone Preference and Explicit Celebrity Brand Preference (12-year-olds: r = .465, p = .002; 14-year-olds: r = .304, p = .02) showing that, for these children, liking for brands was consistent across presentation types (with or without a celebrity). In contrast, for the eight-year-olds there was a significant negative correlation present (r = -.292, p = .05) suggesting that, for the youngest children, those who liked one type of presentation tended to dislike the other.

For the two older age groups (12-years and 14-years) analysed together, a positive relationship (r = .364, p < .001) between Explicit Brand Alone Preference and Explicit Celebrity Brand Preference remained, indicating that there could be a shift around the age of 12-years in how children treat brands paired with celebrities. Correlational tables for both 12-to 14-year olds (Table 7.4), and eight- to 10-year olds (Table 7.5) can be seen below.

Table 7.4 Study 5: Correlations between Explicit Brand Alone Preference, Explicit Celebrity Brand Preference, Brand Choice, Scepticism Before and Scepticism After for children aged 12- and 14-years (n = 95).

	1.	2.	3.	4.	5.
1. Explicit Brand Alone Preference	-				
2. ExplicitCelebrity BrandPreference	.364**	-			
3. Brand Choice	507**	.249*	-		
4. Scepticism Before	004	244*	160	-	
5. Scepticism After	003	223*	165	.883**	-

^{**} Significant at p < .01

^{*} Significant at p < .05

Table 7.5 Study 5: Correlations between Explicit Brand Alone Preference, Explicit Celebrity Brand Preference, Brand Choice, Scepticism Before and Scepticism After for children aged eight- and 10-years (n = 121).

	1.	2.	3.	4.	5.
1. Explicit Brand Alone Preference	-				
2. Explicit Celebrity Brand Preference	144	-			
3. Brand Choice	511**	.549**	-		
4. Scepticism Before	164	151	.007	-	
5. Scepticism After	145	176	071	.807**	-

^{**} Significant at p < .01

Tables 7.4 and 7.5 both show a positive relationship between Scepticism Before and After testing, as expected. Table 7.4 also shows negative relationships between Explicit Celebrity Brand Preference and both Scepticism Before and Scepticism After testing for the older children (aged 12- to 14-years), but these results disappear in the younger age groups (aged eight- to 10-years). This supports the fact that maybe eight- to 10-year-olds have scepticism but are unable to use it. The correlations of the older children offer support for this finding.

7.4 Discussion

In line with the results of Study 4 carried out with young adults, the findings of the current study have shown that amongst a sample of children aged eight to 14-years, brands presented alone are preferred to brands paired with a known celebrity. When analysed individually, all age groups had a preference for brands presented alone and chose a brand presented alone. These findings appear to show evidence of resistance in all age groups, which would support the claims of Rozendaal, Buijzen et al. (2011) that children as young as eight-years of age have a good understanding of celebrity advertising. When considering the work of Friedstad and Wright (1994) and the Persuasion Knowledge Model, it would be reasonable to expect eight-year-olds to rate brands presented alone and celebrity paired brands equally, or to prefer celebrity brands more. As discussed in section 1.2, work from Piaget, Theory of Mind and

^{*} Significant at p < .05

the Persuasion Knowledge Model suggests that the cognitive abilities of eight-year-olds may be limited, which could impede their ability to understand the intentions of advertisers and therefore mean that their capacity to resist ads is limited. However, the results presented here suggest resistance did occur in the younger age groups.

On the other hand, the results of this study also showed that preference for brands (regardless of how they were presented – with/without a celebrity) overall decreases with age, with further analyses showing brand preference to be lower in the two older age groups (12-year-olds and 14-year-olds) compared to the younger age groups (eight-year-olds and 10-year-olds). This finding is to be expected and would be predicted by the Persuasion Knowledge Model (Friedstad & Wright, 1994) and the findings of other studies (see section 1.2) – as children get older their understanding of advertising and its intent increases. It seems plausible to suggest that as understanding of advertising increases so too do levels of scepticism and this is what was found here as the eight-year-olds were less sceptical about advertising than older children. Again, this would fit with Piaget and the Persuasion Knowledge Model (Friedstad & Wright, 1994). Furthermore, for older children scepticism was negatively related to celebrity brand preference, yet for younger children this was not the case.

The general levels of scepticism increased with age, but this highlights the fact that, although scepticism was lower in the eight-year-old group, they preferred brands presented alone just like older children. In the older age groups, when the celebrity was present, higher scepticism was associated with lower brand preference. So, this could mean that, similar to the young adults in Study 4, scepticism influences the explicit celebrity brand preferences of the 12- and 14-year-olds. This would demonstrate how high ad scepticism can be involved in the resistance of the celebrity effect. In contrast, despite preferring brands presented alone, younger children's judgments appeared to involve different underlying processes. The 10year-olds seemed to be equally as sceptical as the older children according to their scepticism scores, but their judgments showed no relationship between scepticism and brand preference. This is indicative of the fact that they may not apply their scepticism in the same way as older children. The eight-year-olds were not as sceptical as the older children yet also demonstrated a preference for brand alone suggesting that rather than being rooted in scepticism, their brand responses had an alternate basis. One possibility is suggested by the research findings of Rozendaal, Buijs et al. (2016) who claimed that the recognition of being manipulated would trigger unpleasant associations which lead to negative feelings towards ads. It is also possible that whilst the eight-year-olds didn't have levels of scepticism as high as the older children, they could have had enough scepticism to trigger a preference against the celebrity brands. A measure of affect-based scepticism was incorporated into Study 6, to explore whether affective responses in children are related to brand preference and brand choice.

As in Study 4 with young adults, in the 12- to 14-year-olds (but not for the younger children), there was a negative relationship between scepticism and brand preference that was only seen when the celebrity was present. This suggests that the celebrity may have triggered scepticism in these older participants which affected their brand preferences. Further evidence that the younger and older children are responding differently lies in the

relationship between their brand alone and celebrity brand preference scores. For the two older age groups (12-years and 14-years) there is a positive relationship between brand alone scores and celebrity paired brand scores suggesting that if they like brands presented alone they tend to also like brands with celebrities, so the older children seem to be responding in terms of a general approach to advertising. For the younger age groups no similar relationships emerged. This indicates that it could be around the age of 12-years when advertising is better understood by children and that older children tend to have a more stable attitude to brands. This shift is better indicated by the lower brand preference for 12-year-olds (and 14-year-olds) than 10-year-olds (and eight-year-olds). This fits with previous literature which suggests that by the age of 12-years of age children understand the intentions of advertising on an adult level have a more adult-like approach to ads.

Rozendaal, Buijzen et al. (2011) claimed that children as young as eight-years-old recognise the intended effect of celebrity advertising. The results seen here, whereby younger children matched the older children in preferring brands presented alone over celebrity brands, at first sight, offer support for this claim. However, having understanding of the intent behind celebrity advertising and being able to act upon it may not go hand in hand. It could be that eight-year-olds are able to recognise persuasive intent but don't know how to apply that knowledge and, although they act like older children and also prefer brands presented alone, they may have very different reasons for holding this preference. Therefore, whilst findings presented in this study support the work of Rozendaal, Buijzen et al., and children of all ages did appear to recognise the intention of the celebrity, some of the findings are better suited to being explained by the Persuasion Knowledge Model (Friedstad & Wright, 1994). For example, overall brand preference decreased with an increase in age, and older children were more sceptical than younger children, findings which further support the notion of the PKM. This suggests that in general, older children are better able to reflect upon their own thinking and the thoughts of others. This corresponds with their ability to understand more about the purpose and intent of advertising. In sum, these findings can be explained by drawing upon the findings of both Rozendaal, Buijzen et al., and that of the PKM. Although basic brand preferences and choices were the same across age groups, the underlying processes which underpin these judgments may have been different.

The main model of advertising that has been drawn upon extensively throughout this thesis has been the Persuasion Knowledge Model, dated 1994 (Friedstad & Wright). Over the last 25 years the advertising market has grown substantially, with many more advertising techniques forming part of our daily lives - for example, there has been a recent surge in electronic advertising with Internet ads often being personally tailored to our browsing habits. Advertising methods are now ubiquitous meaning adults' and children's defences may have evolved, or people may not attend to all advertising. Additionally, the nature of television advertising has changed, and people are now able to skip ads or watch ad-free programmes via newly developed apps. These are factors that the PKM model may not be able to accommodate. This will be explored in the general discussion (see section 11).

In conclusion, the results of this study showed that overall explicit preference for brands (regardless of how they were presented – with/without a celebrity) decreases with age,

with further analyses showing brand preference to be lower in the two older age groups (12-year-olds and 14-year-olds) compared to the younger age groups (eight-year-olds and 10-year-olds). Scepticism could be important in influencing explicit brand judgments in children aged 12- and 14-years but not younger children, providing support for the notion that it could be around the age of 12-years when children are better able to engage in propositional reasoning about advertising.

It is important to recognise that this study only looked at children's explicit responses, which only addresses half of the main aims of this thesis. The small sample of children tested in Study 1 indicated that children would also have an implicit preference for celebrity brands (at least when paired with well-liked celebrities). To examine this with a much larger sample of children of varying ages, the implicit measure was reintroduced in Study 6 to examine the effects of celebrity on implicit, as well as explicit preferences. Results from the small sample of children in Study 1 suggest that children are likely to find the implicit preference difficult to overcome. However, the suggestion of Rozendaal, Bujis et al. (2016) should be acknowledged, and thus it could also be found that the negative feelings encountered by the recognised manipulation attempt may trigger resistance in implicit preferences also. Due to underdeveloped cognitive abilities however, this may not occur in the younger age groups.

The main analysis discussed so far throughout this thesis has focused on brand preferences (both explicit and implicit), when brand choice may also offer an insight into the influence that scepticism and celebrity pairings have on our choice decisions. Studies 3, 4 and 5 all used different advertising literacy scales, and each of these individual scales tapped into different aspects of ad literacy - for example, understanding bias, disliking of ads, and truthfulness of ads. Chapter 8 therefore offers reanalysis of Studies 3, 4 and 5 to further explore the relationships between scepticism, brand preferences and brand choice. Study 6 builds upon these findings to investigate scepticism, brand preferences (explicit and implicit) and brand choices of eight- to 14-year-old children.

8 Reanalysis of Studies 3, 4 and 5

The findings from Study 5 showed that scepticism may impact differently upon the responses of younger and older children and it isn't clear from the results what caused younger children to prefer brands presented alone to celebrity paired brands. Also, because Studies 3, 4 and 5, used different scepticism scales from each other, further analyses were conducted of each study to look in more detail at the relationship between scepticism to advertising, brand preferences and final brand choice. Much of the previous analysis throughout this thesis has focused on participants' preferences for brands (both explicit and implicit) whereas brand choice may tell us a lot about the influence that scepticism and celebrity pairings has on our choice decisions. Study 3 utilised an adapted version of the Attitudinal Advertising Literacy Subscale (aALS) which is one component of the Attitudinal Literacy Scale for children (Rozendaal, Opree et al., 2016). The aALS consisted of six items which tested understanding of advertising bias (one item), scepticism towards advertising (two items) and disliking of advertising (three items). The scepticism scale used in Studies 4 and 5 was based upon Obermiller and Spangenberg's (1998) scale which looked at belief in the accuracy and truthfulness of ads.

8.1 Study 3 Reanalysed

For the purposes of reanalysis, the aALS was broken down into subscales. Because the two items from the aALS testing scepticism focused upon the truthfulness of advertising these were treated as an 'accuracy-based' scale (i.e. similar to Obermiller & Spangenberg, 1998) and the three items testing disliking of advertising were treated as an 'affect-based' scale. The single item question looking at bias ("how often do you think that what you see in advertisements is like things are in reality?") was omitted for the reanalysis as this item did not fit with explaining either accuracy-based or affect-based scepticism.

When all six items were analysed (original analysis for Study 3) it was found that young adults with higher levels of attitudinal advertising literacy had lower explicit celebrity brand preference and lower implicit preference. When looking solely at the two items which tapped into measuring scepticism more directly, results showed that higher scepticism was related to lower explicit celebrity brand preference only – there was no relationship between scepticism and implicit preference. Reanalysis of the results of Study 3 using the two subscales for accuracy-based and affect-based scepticism provides interesting results (see Table 8.1). This showed there was a negative, significant correlation between accuracy-based scepticism and celebrity paired explicit brand preference (r = -.287, p = .017). Young adults scoring higher on the accuracy-based scepticism scale had a lower explicit preference for celebrity paired brands. There was no significant correlation between affect-based scepticism and explicit brand alone preferences, indicating that, at least in adults, it is their accuracybased scepticism which counteracts the celebrity effect in their explicit responses. However, for implicit brand preference the opposite was true. There was a significant, negative correlation between affect-based scepticism and implicit preference scores (r = -.247, p =.04). Young adults who had higher affect-based scepticism had lower implicit preference for

brands paired with celebrities. On the other hand, there was no significant correlation between implicit preference and accuracy-based scepticism. All of the correlations can be seen in Table 8.1.

Table 8.1 Table of correlations for Explicit Celebrity Brand Preference, Explicit Non-Celebrity Brand Preference, Implicit Preference, Affect-Based Scepticism, Accuracy-Based Scepticism and Brand Choice for Study 3.

	1	2	3	4	5	6
1. Explicit	-	-	-	-	-	
Celebrity						
Brand						
Preference						
2. Explicit		-	-	-	-	
Non-Celebrity	.014					
Brand						
Preference						
3. Implicit	.074	.030	-	-	-	
Preference						
4. Affect-Based	131	034	247*	_	_	
Scepticism						
-						
5. Accuracy-	207*	020	146	205*	-	
Based	287*	028	146	.305*		
Scepticism	0.0.1 ded	10.5	22 04	0.42	000	
6. Brand choice	.301**	136	.238*	042	.022	

^{**} significant at p < .01

To examine whether scepticism (both Accuracy-Based Scepticism and Affect-Based Scepticism) and brand preferences (Explicit Celebrity Brand Preference and Non-Celebrity Brand Preference) are significant predictors of final Brand Choice, a regression analysis was conducted including Brand Choice as the DV and Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Celebrity Brand Preference, Explicit Non-Celebrity Brand Preference and Implicit Preference as the five IVs. Using the enter method it was found that the five IVs explain a significant amount of the variance in the final brand choice F(5, 61) = 2.65, p = .031, $R^2 = .17$, $R^2_{Adjusted} = .11$. The analysis showed that scepticism (both Accuracy-Based and Affect-Based) and Explicit Non-Celebrity Brand Preference did not significantly predict final Brand Choice however Explicit Celebrity Brand Preference and Implicit Preference were significant predictors. The results can be seen in Table 8.2.

^{*} significant at p < .05

Table 8.2 Regression analysis. Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Celebrity Brand Preference, Explicit Non-Celebrity Brand Preference and Implicit Preference as predictors of Brand Choice score for Study 3.

	Beta	T	Sig.
Accuracy-Based Scepticism	.144	1.136	.261
Affect-Based Scepticism	.012	.094	.926
Explicit Celebrity Brand Preference	.328	2.705	.009
Explicit Non-Celebrity Brand Preference	142	-1.225	.225
Implicit Preference	.241	2.007	.049

The regression results show that both Explicit Celebrity Brand Preference and Implicit Celebrity Brand Preference were significant positive predictors of Brand Choice, indicating that the more positive the explicit and implicit preference, the more likely celebrity brands were to be chosen within the top three favourite brands. Explicit Non-Celebrity Brand preference was included in the regression to check whether low preference for non-celebrity brands predicts low celebrity brand choice – it did not. Following presentation of these pairings, Explicit Non-Celebrity Brand scores were not related to general advertising scepticism scores (Accuracy-Based nor Affect-Based). For celebrity brand pairings, higher Accuracy-Based Scepticism was related to lower Explicit Celebrity Brand Preference, and higher Affect-Based Scepticism was related to Implicit Preference for celebrity brands. But, although scepticism was related to preferences, scepticism did not have a direct effect upon Brand Choice. On the other hand, both Explicit and Implicit Celebrity Brand Preference were related to Brand Choice.

All of the above findings suggest that for adults, it is accuracy-based scepticism which is related to explicit brand preferences rather than affect-based scepticism. However, the opposite appears true in terms of implicit preferences where affect-based scepticism is related to counteracting the celebrity effect. These results have been depicted in a new model of celebrity advertising (Figure 8.1 below). Although we see these relationships between scepticism and preference in underlying responses to celebrity brands in Study 3 celebrity brands were still preferred and chosen over brands paired with non-celebrities. However, the important factor may be that in Study 3 brands were paired with celebrities selected as being extremely well-liked by each participant.

For the models presented in Figures 8.1 to 8.5, it has been assumed that accuracy-based scepticism occurs at a propositional level. Gawronski and Bodenhausen (2011) describe propositional processes as being validated by conscious thought and logic, meaning that high level of cognitive resource is needed. On the other hand, it has been assumed that affect-based scepticism occurs at an associational level and is based upon the activation of simple associations in memory. Model 8.1 takes account of the participants likely response to the ad event (celebrity brand pairing) then tracks through participant responses at both the

propositional/explicit and associational/implicit level, showing relationships between scepticism and preference and the predictions of brand choice. In terms of Gawronski and Bodenhausen's APE model (2011), it could be that recognising a well-liked celebrity gives rise to propositional processing in participants which generates positive thoughts about the celebrity which have previously been consciously articulated, thus overriding any general concerns about the accuracy of advertising. At an associational level, liking of a specific celebrity could also produce a strong positive affective response which overrides a general dislike of ads. Therefore, although those participants with higher accuracy-based and affect-based scepticism towards ads tended to demonstrate lower explicit preference for celebrity-paired brands overall, celebrity paired brands were still preferred and chosen by the young adults.

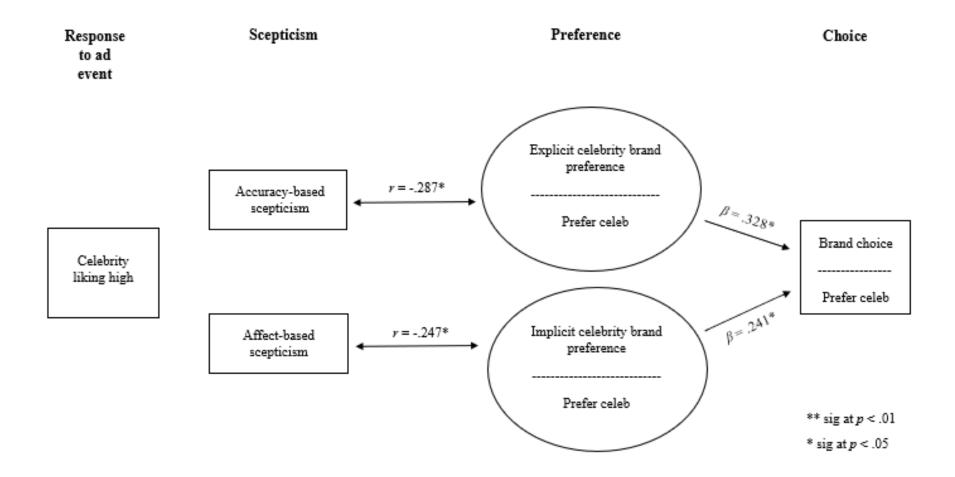


Figure 8.1 Dual process model of young adults' responses to well-liked celebrity advertising

8.2 Study 4 Reanalysed

In Study 4, the scepticism scale adapted from Obermiller and Spangenberg (1998) was used which tested accuracy-based scepticism only. Also, participants only provided their explicit responses to brands. The celebrities in this study were not explicitly well-liked as they were in Study 3, instead they were celebrities that should have been known to the young adults. This was considered to be more representative of typical advertising exposure. Further regression analysis was conducted for Study 4, including Brand Choice as the DV and Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Explicit Brand Alone Preference as the 4 IVs. Using the enter method it was found that the four IVs explain a significant amount of the variance in the final Brand Choice F(4,79) = 4.65, p = .002, $R^2 = .44$, $R^2_{Adjusted} = .15$. The analysis showed that Scepticism Before and Scepticism After did not significantly predict final Brand Choice, however Explicit Celebrity Brand Preference was a positive predictor and Explicit Brand Alone Preference was a negative predictor of Celebrity Brand Choice. The results can be seen in Table 8.3.

Table 8.3 Regression analysis. Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Explicit Brand Alone Preference as predictors of Brand Choice score for Study 5.

	Beta	T	Sig.
Scepticism Before	034	179	.859
Scepticism After	.095	.504	.616
Explicit Celebrity Brand Preference	.437	3.883	.000
Explicit Brand Alone Preference	347	-3.175	.002

The regression results show a negative significant relationship between Explicit Brand Alone Preference and Brand Choice score, indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In comparison, a positive significant correlation between Explicit Celebrity Brand Preference and Brand Choice score was found, indicating that as the celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites. Regardless of the fact that brands presented alone were preferred overall, within the sample the participants who scored higher for accuracy-based scepticism were also more likely to score celebrity brands lower. The initial correlations of Study 3, which showed that higher levels of scepticism were related to explicit celebrity brand choice, are in line with this. Furthermore, the regression with Brand Choice as the DV shows that Celebrity Brand Preference positively predicts Brand Choice. So, scepticism correlates negatively with brand preference and brand preference positively predicts brand choice. These findings can be

depicted in an advertising model of young adults' responses to neutral celebrity advertising (see Figure 8.2).

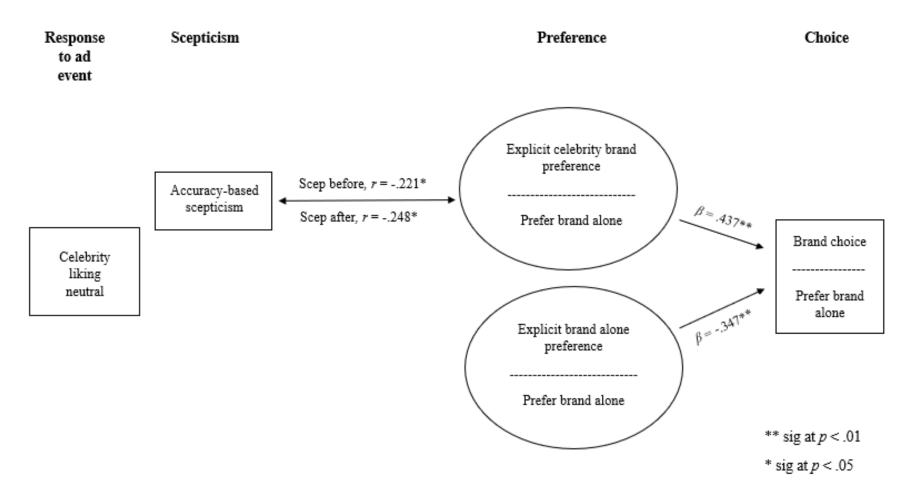


Figure 8.2 Young adults' responses to neutral celebrity advertising - explicit responses only

8.3 Study 5 Reanalysed

As in Study 4, only accuracy-based scepticism and explicit preferences were measured in Study 5 which investigated accuracy-based scepticism and brand preferences in children. The celebrities in this study were not explicitly well-liked as they were in Study 3, instead they were celebrities that should have been known to the children. This matched the method of Study 4 and was considered to be more representative of typical advertising exposure. As reported in the results section of Study 5 (see Table 7.3, page 90) correlational analysis showed that for the eight- to 14-year-olds there was a significant negative correlation between Explicit Celebrity Brand Preference and Accuracy-Based Scepticism scores Before (r = -.226, p = .001) and After testing (r = -.221, p = .001), showing that children who scored higher on the scepticism scale had lower preference for brands presented with celebrities. This matched the young adult sample of Study 4. Furthermore, as was also seen with the young adult sample, there were no significant correlations between scepticism scores and brands presented alone.

A regression analysis including Brand Choice as the DV and Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Brand Alone Preference as the 4 IVs was also conducted for Study 5. Again, using the enter method it was found that the four IVs explain a significant amount of the variance in the final Brand Choice F(4, 190) = 39.23, p < .001, $R^2 = .67$, $R^2_{Adjusted} = .45$. The analysis shows that Scepticism Before and Scepticism After did not significantly predict final Brand Choice however, as in Study 4, Explicit Celebrity Brand Preference and Explicit Brand Alone Preference were significant predictors. The results can be seen in Table 8.4.

Table 8.4 Regression analysis. Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Brand Alone Preference as predictors of Brand Choice score for Study 5.

	Beta	T	Sig.
Scepticism Before	.087	.851	.396
Scepticism After	149	-1.457	.147
Explicit Celebrity Brand Preference	.422	7.669	.000
Explicit Brand Alone Preference	550	-10.146	.000

The regression results show a negative significant finding between Explicit Brand Alone Preference and Brand Choice score, indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In comparison, a positive significant correlation between Explicit Celebrity Brand Preference and Brand Choice score was found, indicating that as the celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites.

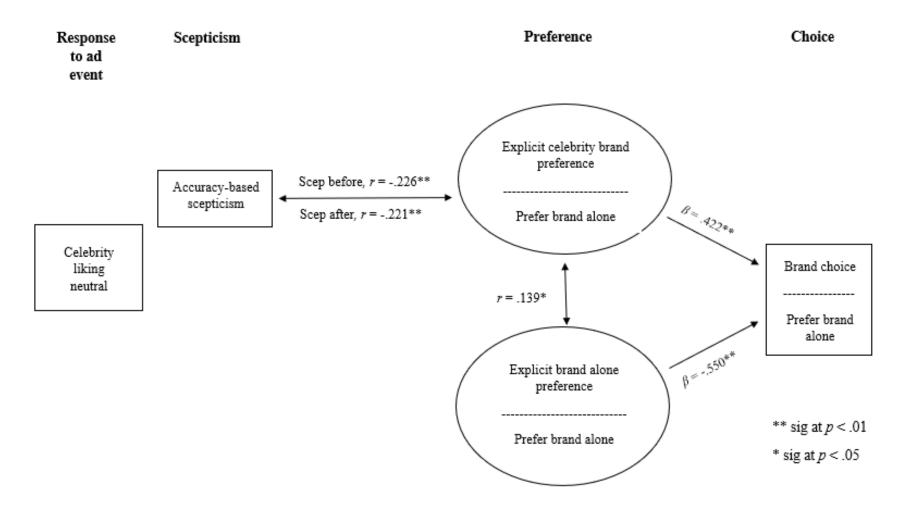


Figure 8.3 A new model of advertising to depict eight- to 14-years-olds explicit responses to neutral celebrity advertising.

It is interesting to look at the regression analyses when broken down into two age groups older children (aged 12- to 14-years) and younger children (aged eight- to 10-years). These results can be seen in Tables 8.5 and 8.6. For the older children a regression analysis including Brand Choice as the DV and Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Brand Alone Preference as the 4 IVs was also conducted for Study 5. Again, using the enter method it was found that the four IVs explain a significant amount of the variance in the final Brand Choice F(4, 85) = 18.79, p < .001, $R^2 = .48$, $R^2_{Adjusted} = .46$. The analysis shows that Scepticism Before and Scepticism After did not significantly predict final Brand Choice however, as in Study 4, Explicit Celebrity Brand Preference and Explicit Brand Alone Preference were significant predictors.

Table 8.5 Regression analysis. Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Brand Alone Preference as predictors of Brand Choice score for older children (aged 12- to 14-years) in Study 5.

	Beta	T	Sig.
Scepticism Before	.006	.035	.972
Scepticism After	056	330	.742
Explicit Celebrity Brand Preference	.496	5.584	.000
Explicit Brand Alone Preference	690	-7.955	.000

The regression results show that Explicit Brand Alone Preference was a negative predictor of Brand Choice score, indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In comparison, Explicit Celebrity Brand Preference predicted a high Brand Choice score. Again, when taken into consideration with the correlational results presented in Table 7.4 (see page 92) these results allow for a model of neutral celebrity advertising to be created based on 12-to 14-year-old children's responses to celebrity advertising (see Figure 8.4).

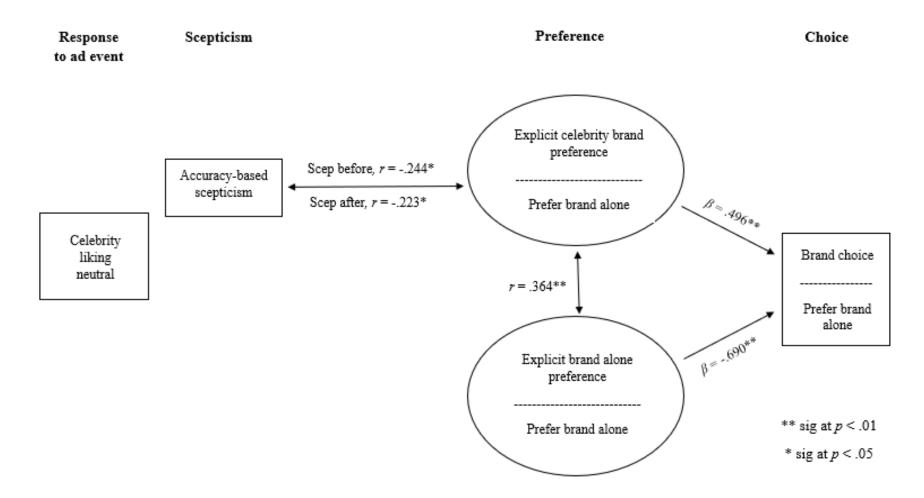


Figure 8.4 12- to 14-year-old children's responses to neutral celebrity advertising

Regression results for the younger children (aged eight- to 10-years) can be seen below. A regression analysis including Brand Choice as the DV and Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Brand Alone Preference as the 4 IVs was also conducted for Study 5. Again, using the enter method it was found that the four IVs explain a significant amount of the variance in the final Brand Choice F(4, 108) = 22.15, p < .001, $R^2 = .46$, $R^2_{Adjusted} = .44$. The analysis shows that scepticism before and scepticism after did not significantly predict final brand choice however, as in Study 4, celebrity brand preference and brand alone preference were significant predictors. Results can be seen in Table 8.6.

Table 8.6 Regression analysis. Scepticism Before, Scepticism After, Explicit Celebrity Brand Preference and Brand Alone Preference as predictors of Brand Choice score for younger children (aged eight- to 10-years) in Study 5.

	Beta	T	Sig.
Scepticism Before	.130	1.029	.306
Scepticism After	172	-1.349	.180
Explicit Celebrity Brand Preference	.435	5.725	.000
Explicit Brand Alone Preference	407	-5.345	.000

The regression results show that Explicit Brand Alone Preference was a negative predictor of Brand Choice score, indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In comparison, Explicit Celebrity Brand Preference predicted high Brand Choice score. When taken into consideration with the correlational results presented in Table 7.5 (see page 93) these results lend themselves to providing support for the model presented in Figure 8.3 (see page 106), although looking solely at the younger age group allows us to tease apart the effect of both accuracy-based scepticism before and after (see Figure 8.5).

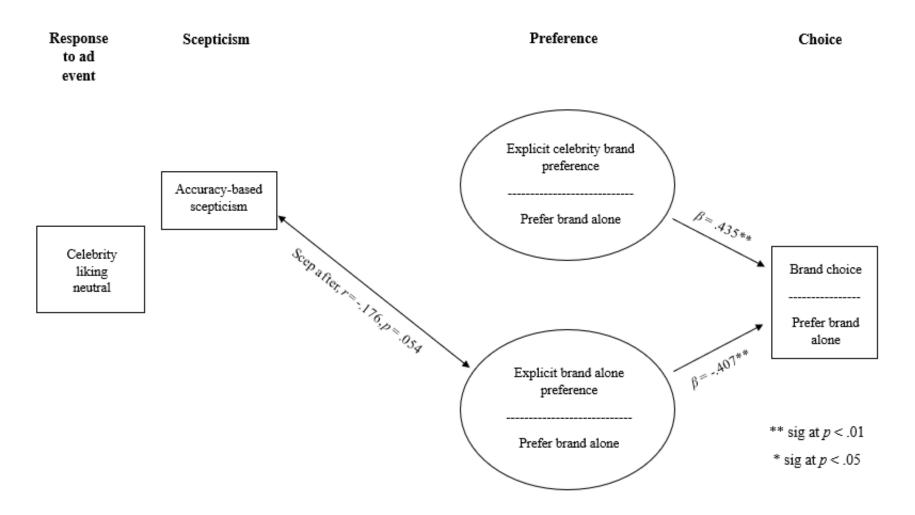


Figure 8.5 Eight- to 10-year-old children's responses to neutral celebrity advertising

In relation to the results of Study 5 presented in this thesis, the eight-year-olds were less sceptical (accuracy-based) than the other age groups, yet just like the older children they preferred brands presented alone. Hudders et al. (2016) in their work with children found that children requested advertised brands more after playing an advergame rather than seeing a TV commercial, and that these effects seem to be mediated by affective but not cognitive advertising literacy. In addition, their results highlighted that cognitive (e.g. accuracy-based) advertising literacy only seems to reduce advertising influence when the affective advertising literacy is high. As reported by Hudders et al., when affective advertising literacy is low, cognitive advertising literacy appears to have a positive influence on children's purchase requests, so it could be that children in the younger age groups (aged eight- to 10-years) have high levels of affective scepticism which has gone unmeasured in Study 5 yet could be important. It may not be the accuracy-based scepticism score which has affected brand choice, but rather an unmeasured affect-based scepticism level (e.g. pre-existing feelings for the given brand and/or celebrity) that has affected the brand presented alone preference. Given the findings of the further analyses conducted, future research should consider affective responses to specific advertising events as an important predictor of attitudes and brand choice which overrides general ad scepticism. This is the basis of the next study.

It could be possible that, when faced with an ad event involving known celebrities for adults, a high level of accuracy-based scepticism is the driver of the ability to defend against the explicit effects of celebrity-based advertising, yet for younger children whose conceptual advertising knowledge may be more limited, high levels of affect-based scepticism is necessary. It may be that in Study 5, children aged eight-years had enough accuracy-based scepticism (as suggested by the PKM) to recognise advertising attempts, but high levels of accuracy-based scepticism may be linked to better conceptual understanding of ads. For eight-year-olds who may have lower levels of conceptual understanding, resistance to ads may depend upon affect-based scepticism. In Study 5, therefore, it may have been affect-based scepticism rather than accuracy-based scepticism which may have led the eight-year-olds to favour brands presented alone, over and above brands presented with a celebrity.

9 Study 6

9.1 Introduction

The aim of this final study was to bring together the methods and results of the previous five studies to examine the effect of both well-liked and known celebrities on explicit and implicit brand preferences and brand choice in children aged eight- to 14-years of age. Additionally, it aimed to explore the role of both accuracy-based and affect-based scepticism, to examine whether having a high level of scepticism can aid in resisting the celebrity effect. As reported in Studies 1 to 3, results failed to see samples of young adults resisting the effect of well-liked celebrities in their implicit, but more surprisingly in their explicit brand judgments. This was an unexpected finding, as previous literature suggests that at the age of around 12-years, children and adults are savvy to the intent of advertising and should be able to recognise its persuasive and manipulative intent. Coupled with Rozendaal, Buijzen et al.'s (2011) finding that celebrity endorsement is one of the earliest advertisers' tactics that children understand, it was surprising to see young adults explicitly preferring brands presented with well-liked celebrities. Although accuracy-based scepticism scores were negatively correlated with explicit celebrity brand preference in Study 3, additional analysis showed that scepticism (both accuracy-based and affect-based) did not significantly predict final brand choice.

Study 4 was the first time that young adults demonstrated resistance to the celebrity effect, showing an explicit preference for brands presented alone as opposed to brands paired with a known celebrity. This finding was replicated in Study 5 with children aged eight- to 14-years of age. Where participants showed high levels of scepticism (Study 3) some resistance to the celebrity effect did appear to be triggered in brand preferences but not enough to detract from an overall preference for celebrity-paired brands across the sample.

Studies 1 to 3 focused upon responses to brands paired with well-liked celebrities in a fairly artificial situation – celebrities and brands were simply paired, and in these studies no resistance to the effects of well-liked celebrities was seen in the responses of the young adults. However, the presentation format in those studies may have impeded young adults' ability to recognise that they were being advertised to and therefore they may not have felt like they were in a realistic advertising situation. If this was the case then participants will not have felt manipulated and, as such, there was unlikely to have been any negative feelings to transfer to their brand preferences (as predicted by Rozendaal, Buijs et al., 2016), suggesting that a strong liking for celebrities in Studies 1 to 3 influenced brand judgments and overrode advertising defences. Studies 4 and 5 looked at known celebrities (not necessarily well-liked) and also presented them with brands in a typical advertising format. This appeared to trigger resistance. Study 6 built on these results to look at the effects of both well-liked and known celebrities using the ad format from Studies 4 and 5, investigating how children between the ages of eight- and 14-years responded to brands paired with well-liked and known celebrities presented in a typical ad format.

Both explicit and implicit responses to brands paired with celebrities were examined in Studies 1 to 3, showing a consistent effect of implicit preference, with young adults having an automatic response to favour brands paired with well-liked celebrities. Because this effect

was consistently replicated and due to the fact that the expected resistance was not seen in explicit judgments, Studies 4 and 5 did not examine implicit preferences. Whilst the small sample of children in Study 1 indicated that children would also have an implicit preference for celebrity brands (at least when paired with well-liked celebrities), the implicit measure was reintroduced in Study 6 to examine the effects of celebrity on implicit, as well as explicit preferences.

Studies 3, 4 and 5 looked at the relationship between scepticism and responses to celebrity-paired brands, although each study used a different measure of scepticism. Findings from Studies 3, 4, and 5 showed that accuracy-based scepticism is associated negatively with celebrity brand preferences, with the results of Study 5 further demonstrating that the relationship between accuracy-based scepticism and explicit preference may occur differently dependent upon age. In Study 6, separate measures of accuracy-based and affect-based scepticism were used to assess children's scepticism and explore how these different aspects of scepticism relate to their brand responses.

One of the aims of Study 6 was to explore the effect of both well-liked and known celebrities in a realistic advertising format. In Studies 4 and 5, with a more typical advertising format, resistance appeared for the first time (although the brands were paired with known rather than well-liked celebrities). Based on predictions derived from the cognitive defence view (see section 1.2) in a situation where the celebrity is well-liked it could be that older children possess the cognitive resources to resist the effects of well-liked celebrities in their explicit brand preferences and choices, whereas younger children do not. Alternatively, if children's resistance to advertising is overridden by liking of celebrities then children should show an explicit preference for celebrity paired brands and also choose them as their favourite brand. When paired with known rather than well-liked celebrities this preference is likely to disappear.

Based on the cognitive developmental literature and also the work on Advertising Literacy along with the results of studies reported thus far in the thesis, it was predicted that in Study 6 older children would have higher levels of scepticism than the younger children. It was further expected that even though older children will have higher scepticism, when presented with well-liked celebrities this scepticism will be overridden and children in the well-liked celebrity group would show an explicit preference for brands paired with well-liked celebrities. It was expected that children in the known celebrity group would use their scepticism to defend against the celebrity, thus showing a preference for brands presented alone. This finding was expected to be particularly prominent in the older children (aged 12-and 14-years).

In terms of implicit responses, based solely on the results of the small sample of children in Study 1, it might be expected that all age groups in both the well-liked and known celebrity conditions in Study 6 will show an implicit preference for celebrity paired brands. Furthermore, the cognitive defence view, which proposes that resistance appears due to explicit propositional processing, and findings such as those of Forehand and Perkins (2005), also offer support for this prediction and suggest implicit associations may be difficult to overcome. However, the simple pairing of celebrities and brands in Studies 1 to 3 may not

have triggered feelings of being manipulated and based on the literature (such as Rozendaal, Buijs et al., 2016) which suggests that dual processes interact, it could be predicted that associational implicit preferences could be triggered in Study 6 if recognition of manipulation and persuasion occurs. It is possible that this might be found in the older children only, where a more sophisticated understanding of celebrity advertising is present, although it could be that this occurs even in the youngest children if they are able to recognise the intentions behind celebrity advertising, as Rozendaal, Buijzen et al., (2011) suggest.

It may also be the case that how explicit and implicit processes interact occurs differently dependent on whether participants are presented with brands paired with well-liked celebrities or with celebrities for whom they have no strong feelings overall. It would not be too surprising, for example, if strong affective responses triggered by well-liked celebrities impact upon implicit associational responses to the brands – and these effects may occur differently in children of different ages. In Study 5, younger children, with lower levels of accuracy-based scepticism, were just as likely to prefer brands presented alone as the 14-year-olds. One possible explanation for this is that, as suggested by Rozendaal, Buijs et al. (2016), their responses to the brands were driven by an affective response - 'gut-feeling' – which in turn impacted upon their explicit brand preferences. This opens up the possibility that younger children's brand responses were generated by different underlying processes than those of the older children. This possibility was explored further in Study 6.

In Study 6 a measure of affect-based scepticism was introduced in order to assess the relationship between children's explicit and implicit responses to celebrity brands and their general liking or disliking of advertising. Previously in the literature, rather than examine children's general liking or disliking of ads, there has been a tendency to measure children's attitude to ads, sometimes including a component of liking or disliking as one of several measures (see the Attitudinal Ad Literacy Scale; Rozendaal, Opree et al., 2016), or to assess their affective response towards a particular advertising format (e.g. TV advertising) or even an specific advertising event such as an online advergame (Hudders, Cauberghe & Panic, 2016). In Study 6, general affect-based ad scepticism was measured as a separate item. Based on the notion that affect-based scepticism involves simple associational processing (or 'gutfeelings') and in the absence of any previous research with such a measure, it was unknown whether age differences in affect-based scepticism would be present in this sample. However, Study 5 highlighted that children in the younger age groups (e.g. aged eight-years) demonstrated an explicit preference for brands presented alone, just like the older children. This led to the suggestion that for eight-year-olds resistance to ads may depend upon affectbased scepticism - it may have been a general 'gut-level' dislike of ads that led the eightyear-olds to favour brands presented alone over and above brands presented with a celebrity rather than accuracy-based scepticism. If so, it could be that eight-year-olds demonstrate similar levels of affect-based scepticism to 14-year-olds.

To summarise, across all of the previous five studies results have suggested that when the celebrity advertising a brand is considered to be well-liked, any defence triggered by high levels of scepticism is overridden and both an explicit and implicit preference is shown for celebrity brands. However, when the celebrity is only known and there is no particular high liking, the celebrity effect disappears.

9.2 Method

9.2.1 Participants

207 children (mean age = 11.24, SD = 2.13) took part in this study, although only 174 children (92 male) were included in the final analysis. This study ran over three consecutive weeks and any child who was absent for one or more of the sessions was left out of the analysis. In order to be able to specify clear age groups only children whose age fell into one of the following age categories was included in the study: eight-year-olds (7 years 8 months to 9:4); 10-year-olds (9:8 to 11:4); 12-year-olds (11:8 to 13:4); and 14-year-olds (13:8 to 15:4) and therefore any child not within these ranges was also excluded. Children in each age group were allocated to one of two conditions – approximately half being presented with well-liked celebrities and brands alone, and the remaining being presented with known celebrities and brands alone.

From the remaining sample 46 children (27 male; 22 "well-liked" condition) were in the eight-year-old group (mean age = 8.36, SD = .44), 38 children (20 male; 19 "well-liked" condition) aged 10-years-old (mean age = 10.53, SD = .47), 44 children (21 male; 22 "well-liked" condition) aged 12-years-old (mean age = 12.05, SD = .15) and 46 children (24 male; 20 "well liked" condition") aged 14-years-old (mean age = 13.93, SD = .33). Overall 83 children participated in the well-liked celebrity condition and 91 in the known celebrity condition.

9.2.2 Materials

Children were tested over three consecutive weeks, and at each time point were presented with printed questionnaires. In week two, during the implicit testing stage, participants were also presented with an online IAT test on laptop computers.

Unlike Studies 1 to 3, where a larger selection of celebrities were rated and chosen to tailor individual preference, children in this study were all presented with the same (piloted) celebrities. This was due to the large sample of children that were to be tested. It was important for this study that children were tested on the same day each consecutive week and the only way to ensure that this could happen was to test explicit preferences via paper and pen method in a classroom. It was unfeasible to individually measure celebrity preference in this study. Therefore, to determine the celebrities to be used in the study a pilot study including children aged eight- to 14-years of age was conducted to indicate which celebrities' children in each age group have a high liking for. This measure was included to check that those in the well-liked celebrity group did in fact have a higher liking for the celebrities presented to them than the children in the known celebrity group. A single mean score (high score representing high celebrity liking) was generated for each child.

In **Week 1** children were presented with a questionnaire containing three sections. The first section tested children's conceptual advertising literacy prior to presentation of the brands using the six-item Accuracy-Based Advertising Scepticism Scale adapted from Obermiller and Spangenberg (1998), (see Appendix 9.1) and also used in Study 5. Two questions were removed for Study 6 to avoid repetition of questions (e.g. "most adverts tell

the truth" and "adverts are usually truthful") and to make the questionnaire shorter. The readability of this scale was improved (before = 16-years-old, after = eight-years-old, Flesch-Kincaid readability test) to make the scale more appropriate for the younger age groups. The scale consisted of six questions which tested scepticism towards advertising with responses occurring on a four-point scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. As in Studies 4 and 5 the "neither agree nor disagree" response was removed to reduce the number of people stating they have no opinion when they actually do (Bishop, 1987).

A five-item scale testing children's affect-based scepticism was developed for this study (see Appendix 9.2), with items taken from scales used by Hudders et al. (2016) and Rozendaal, Buijs et al. (2016) combined to compile a measure of affect-based scepticism. The scale consisted of five statements, with the readability suitable for children aged seven-years-old (Flesch-Kincaid readability test). Two of these items negatively worded to prevent a response set where participants respond favourably or unfavourably to all items (Marsh, Barnes, Cairnes, & Tidman, 1984). These two items ("I think adverts are boring" and "I think adverts are stupid") were reverse coded before analysis, and responses occurred on a four-point scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Again the "neither agree nor disagree" response was removed. A mean accuracy-based scepticism score and mean affect-based scepticism score was calculated for each participant (high score representing high scepticism in each of the scales).

The second section of the questionnaire presented children were presented with four celebrities - either four that were considered to be "well-liked" or four that should be known to children without particularly being considered liked or disliked and were asked to respond on a scale of one to nine to indicate how much they liked (maximum score of nine) or disliked (minimum score of one) each presented celebrity (see Appendix 9.3).

The last section in this questionnaire presented children with eight printed images of backdrop boards containing brand logos for brands that they should have knowledge of but no particularly strong liking. These brands were consistent with the brands used in earlier studies reported in this thesis. Children were asked to rate each brand on how much they liked (maximum score = nine) or disliked (minimum score = one) each brand, and an overall mean brand score was calculated. Therefore Week 1 served to test children's initial preference for brands prior to these being paired with celebrities and also gave an indication of their baseline scepticism – both accuracy-based and affect-based.

In Week 2 children were again presented with a questionnaire and also took part in an IAT on a laptop computer. There were four different versions of the questionnaire each with a series of images of backdrop boards containing brand logos, half of which had the image of a celebrity superimposed. Each child was presented with only one of these questionnaires. Two of the questionnaires contained well-liked celebrities and two contained known celebrities that children had seen in week one. For each questionnaire type (well-liked and known) the celebrity and brand pairings were counterbalanced so that if Child A saw the four celebrities paired with Aquafresh, Lacoste, Subway and Puma, then Child B saw the four celebrities with the other four brands (Heinz, Nivea, Motorola, Chanel). Children saw each of the celebrities they had previously seen in week one. Each image (either brand alone

or brand with celebrity) was presented separately on one page and measured 3.5" x 2" and preceded a question "How much do you like this brand?" to which participants could respond on a scale from "1 - Not at All" to "9 - Very much". For each of the eight brand images children were also presented with the affect-based scepticism scale so that scepticism for each of the individual brands and celebrity paired brands could be recorded. The scale consisted of five statements, with two of these items negatively worded and reverse coded before analysis ("I think adverts are boring" and "I think adverts are stupid"). Responses were made on a four-point scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Again the "neither agree nor disagree" response was removed. The second section of the questionnaire presented all eight brand logos on a page and asked participants to choose their favourite three brands and to give the reasons for their selections.

Children were then asked to complete the IAT and they did this individually on a laptop provided by the researcher. Children were presented items from four categories: i) images of their four 'celebrity brands', ii) their four 'brands presented alone', iii) five 'positive' attributes (e.g. happy, nice) and iv) five 'negative' attributes (e.g. sad, nasty). They were instructed to use the 'E' and 'I' keys to categorize each item quickly while making as few errors as possible. The IAT ran in five stages with two initial familiarisation trials (images and attributes) followed by the first set of test trials where the concept categories 'celebrity brands' and 'good' were combined on the 'E' key and 'brand alone' and 'bad' were combined on the 'I' key. The concept category pairings were then reversed on the two keys for a further familiarisation trial and following this the second set of test trials ran with this reversed key orientation. As suggested by Cvencek et al. (2011) and Greenwald, Nosek, and Banaji (2003) to reduce the need for children to sustain their attention for a long period of time, the standard IAT length of trials was reduced by 20% for use with younger participants. Therefore, the three practice trials contained 16 items and the two test trials (celebrity brands and positive / celebrity brands and negative) contained 32 trials. The order of presentation was counterbalanced so that half of the children responded to celebrity brands / positive attributes and brand alone / negative attributes first, whereas half of the children responded to celebrity brand / negative and brand alone / positive first. The calculation of IAT scores using the D-algorithm also followed the recommendations of Greenwald et al. (2003) Positive D scores indicated an implicit preference for celebrity brands.

In Week 3 children were presented a questionnaire with the eight brand logos that they had seen in the previous two weeks and were asked to indicate for each one how much they liked the brand from 1 = not at all, to 9 = very much. An overall mean brand rating for each child at post-test was calculated. Children were then presented with the conceptual scepticism scale from week one and the affect-based scepticism scale previously seen in week one and week two so that a measure of these two types of scepticism could be identified at post-test.

9.2.3 Procedure

Ethical approval was gained from the university ethics committee (see Appendix 9.4). Following the development of materials participants were recruited. Headteachers of schools

in Stoke-on-Trent and Staffordshire were sent a letter which thoroughly detailed the research requirements and the importance of the research (see Appendix 9.5). Headteachers who expressed an interest in allowing participation from children at their school were subsequently visited to discuss the research further. Agreement to participate was received from three schools, with one school agreeing testing of children aged eight-years and 10-years. A £50 book voucher was given as a thank you to each participating year group.

Because the study was not considered to be of a nature which would be likely to cause upset with young children, the university's ethical panel deemed it suitable for a parental optout method to be employed. A letter was sent home to parents/guardians of all children eligible to participate which detailed the research aims (see Appendix 9.6). The letter gave contact details of the researcher as well as that of the researcher's supervisors if anyone wished to discuss the research further. Letters were sent out by the school two weeks prior to data collection. Any forms returned to the schools were obtained by the researcher and it was ensured by the class teacher that children who had returned an opt-out form did not participate.

In Week 1 and Week 3 data collection took place in children's classrooms on a whole class basis. Children were given the instructions verbally and reminded that although a letter had been sent home, participation in the study was voluntary and they could be given an alternative activity to do if they wished. Children who had been opted out by the parents, or those who said they didn't wish to take part in the study were asked to carry on with their reading books. Consent was assumed upon completion of the questionnaires. To ensure that children in the youngest age group (aged eight-years-old) understood each question, the researcher read each question aloud, along with the response options and gave time for the children to make their selections. Generally, each child worked through the questionnaire at the same time as the researcher. Upon completion at the end of each week a verbal debrief was given (see Appendix 9.7) and the children were thanked for their participation.

In Week 2 children in the younger age groups (aged eight- and 10-years) were tested in a quiet room adjoining their classroom in groups of six. Children in the older age groups were given individual allocated times to arrive for participation. In each instance children sat around a large table and were firstly given the questionnaire to complete – this was read aloud for the younger children. Once all questionnaires had been completed each child was given a laptop and were given instructions for the IAT part of the study. Children completed both tasks in silence and there was no evidence of group testing being problematic or distracting. Once the IAT had been completed by all children they were verbally debriefed and thanked for their participation.

9.3 Results

Initial celebrity liking (Week 1)

Preliminary analyses were conducted to ensure that the celebrities used in the "well-liked" group were rated significantly higher than the celebrities used in the "known" group. The means (SD) for each age group can be seen in Table 9.1.

Table 9.1 Study 6: Initial mean preference (SD) for Well-Liked Celebrity and Known Celebrity by age.

Age group	Well-Liked Celebrity	Known Celebrity
eight-years (n=46)	6.52 (1.77)	5.60 (1.78)
10-years (n=38)	6.91 (1.51)	4.08 (2.20)
12-years (n=44)	6.02 (2.62)	3.84 (1.50)
14-years (n=46)	4.92 (1.73)	2.74 (1.70)
Whole sample	6.09 (2.07)	4.00 (2.05)

When looking at individual age groups 10-year-olds (p < .001), 12-year-olds (p = .001) and 14-year-olds (p < .001) had a significantly higher preference for well-liked celebrities. Although the difference in preference for well-liked and known celebrities in the eight-year-old group was not significant, preference scores were in the same direction as for the older groups. For the overall sample, analysis showed that there was a significant difference in preference between the well-liked and known celebrities, with the celebrities presented in the well-liked condition having a higher rating score (M = 6.09, SD = 2.07) than those in the known celebrity condition (M = 4.00, SD = 2.05), t(169) = 6.62, p < .001, d = 1.01.

The scores of the 14-year-olds are lower than those of children in the lower age groups for both the well-liked and known celebrities. Although a pilot study revealed that the four celebrities were considered to be well-liked by children of this age, the sample of 14-year-olds participating in this study was culturally diverse which could explain why some of the children rated the celebrities quite neutrally or towards the lower end of the rating scale. Whilst there is a significant difference between the well-liked celebrity liking score and the known celebrity liking score, when looking at the means of the other age groups it could be suggested that the 14-year-olds displayed some level of dislike for the known celebrities and had no particular liking for the well-liked celebrities.

Immediate explicit brand preference (Week 2)

Immediate explicit brand preference for brands paired with well-liked and known celebrities and brands presented alone for each age group are shown in Table 9.2.

Table 9.2 Study 6: Mean (SD) immediate Explicit Brand Preference for brands presented with a celebrity and brands presented alone for each age group (Week 2).

-	Well-Liked Celebrities			Knov	vn Celebrities	
	Explicit	Explicit	Р	Explicit	Explicit	p
	Celebrity	Brand		Celebrity	Brand Alone	
	Brand	Alone		Brand	Preference	
	Preference	Preference		Preference		
eight-years	6.16 (2.28)	5.20 (2.02)	.142	5.19 (1.67)	5.92 (1.88)	.068
(n=46)						
10-years	6.12 (1.60)	6.00 (1.69)	.816	5.61 (1.88)	5.36 (1.70)	.654
(n=38)						
12-years	6.51 (1.45)	5.57 (1.45)	.018	5.09 (1.70)	5.75 (.98)	.118
(n=44)						
14-years	4.63 (1.42)	6.05 (1.77)	.003	6.14 (1.24)	4.82 (1.37)	<.001
(n=46)						

To examine the effects of age and brand presentation type a 4 (age) x 2 (presentation – celebrity brands vs brand alone) x 2 (celebrity group – well-liked vs known) mixed ANOVA was run with age and celebrity group as between subjects variables and presentation type as the repeated measure. This showed no significant main effects of presentation type, celebrity group or age. There was, however, a significant interaction between age group, celebrity group and presentation type $(F(3,166) = 11.52, p < .001, \eta p^2 = .172)$. Further exploratory ttest analyses were conducted with Bonferroni correction applied to correct for the eight comparisons. Therefore p < .006 is used as the threshold of significance. Results found that eight-year-olds, 10-year-olds and 12-year-olds showed no significant difference in preference for brands presented alone or with well-liked celebrity brands and no preference between brand alone and known celebrity brands. For the 14-year-olds in the well-liked celebrity group there was a significant preference for brands alone (M = 6.05) over celebrity brands (M = 4.63): t(26) = 3.36, p < .001, d = .88. In contrast, in the known celebrity group there was a significant preference for celebrity brands (M = 6.14) over brand alone (M =4.82): t(26) = -5.79, p = < .001, d = 1.01. Interestingly, the results of the 14-year-olds in the well-liked celebrity group seem to show resistance to the celebrity effect – something which was expected of the young adults in Studies 1 to 3. Reasons for this will be explored further in the discussion.

Immediate implicit brand preference (Week 2)

The IAT produces a single score (referred to as D). The magnitude of the score indicates the degree of preference (.15 = small effect size; .35 = medium effect size; .60 = large effect size; Rudman, 2011) with positive D-scores representing an implicit preference for celebrity brands and a negative D-score representing a preference for brands alone. Immediate Implicit Brand preference scores are shown in Table 9.3.

Table 9.3 Study 6: Immediate Implicit Brand Preference for each age group in the Well-Liked Celebrity and Known Celebrity conditions. Positive scores represent preference for celebrity brands.

Age group	Well-Liked Celebrity	Known Celebrity	Overall Implicit Preference
eight-years (n=46)	033 (.37)	.244 (.39)	.119 (.40)
10-years (n=38)	010 (.30)	.259 (.53)	.128 (.45)
12-years (n=44)	.196 (.34)	071 (.42)	.060 (.40)
14-years (n=46)	257 (.62)	351 (.72)	310 (.68)
Whole sample	023 (.46)	007 (.59)	015 (.53)

The above table shows the calculated D score for each of the age groups in each of the two experimental conditions. Calculation of the IAT scores using the D-algorithm also followed the recommendations of Greenwald, et al. (2003) where positive D scores indicate an implicit preference for celebrity brands and negative scores indicate a preference for brands presented alone. The D score results of the 14-year-olds are both negative which suggests that this age group have resistance to both types of celebrity (well-liked and known).

A fully between subjects 4 (age) x 2 celebrity group (well-liked vs known) ANOVA explored children's immediate implicit brand responses. This showed a significant main effect of age $(F(3,163) = 7.20, p < .001, \eta p^2 = .12)$ with the 14-year-olds overall showing a higher implicit preference for brands presented alone than children in the younger groups (all p < .05). There was no significant effect of celebrity group, but there was a significant interaction between celebrity group and age $F(3,163) = 3.03, p = .031, \eta p^2 = .05$. Post hoc tests for the well-liked celebrity group were conducted with Bonferroni applied to correct for the four age groups being compared. Therefore p < .01 is used as the benchmark for statistical significance. Results show a significant effect of age F(3,75) = 3.75, p = .015, with 12-year-olds (M = .19, SD = .34) and 14-year-olds (M = -.26, SD = 62) being statistically different (p = .007). Further post hoc tests for the known celebrity condition (again, with p < .01 used as the benchmark for statistical significance) were conducted. Results show a significant effect of age F(3,87) = 6.61, p < .001, with 14-year-olds (M = .35, SD = .73) being statistically different to both eight-year-olds (M = .24, SD = .38, p = .002) and the 10-year-olds (M = .26, SD = .53, p = .002). This shows that the 14-year-olds are responding

differently to the younger age groups and differently to the young adults in Studies 1 to 3. Furthermore, the implicit response of the 14-year-olds is not like their explicit response in Week 2, which provides evidence for a dual-process approach.

Based on these findings the **overall** results were used to run a one sample t-test, excluding the 14-year-olds to explore whether the responses of this age group are carrying the preferences of the overall sample. Results of the children aged eight- to 12-years showed the mean implicit score (.100) to be significantly higher than the baseline score of 0, demonstrating that children aged 12-years and younger had a significant implicit preference for celebrity paired brands t(118) = 2.64, p = .009. Analysis of the 14-year-old sample found a significant implicit preference for brands presented alone, with the implicit score (-.310) being significantly lower than the baseline score of 0, t(45) = -3.10, p = .003.

Brand choice (Week 2)

Initially participants' brand choices were analysed by looking at their first choices only. Of the 174 participants, 53% chose a celebrity paired brand as their first choice and 44% chose a non-celebrity brand. Four children did not complete the brand choice questions. When broken down into well-liked and known celebrities, of the 83 who saw liked celebrities (one child did not respond), 50% chose a celebrity brand as their first choice, and from the 91 who were presented with known celebrities (three children did not respond) 57% also chose a celebrity brand as their first choice. Analysis was also conducted on the overall choice score generated from the three favourite brands selected. For each of the celebrity brands selected a score of 1 was given and therefore children could score between 0 (all three selections were previously brand alone) to 3 (all three selections were previously a celebrity brand). When looking at the three favourite brands selected across the overall sample, the average brand select score (with three being the max) was 1.58 (SD = .83). There was no significant preference for celebrity brands as a whole. Looking across the two different groups (well-liked vs. known) there were also no significant main effects of celebrity pairing on brand choice for any of the individual age groups in either condition. The Brand Choice score for each age group can be seen in Table 9.4.

Table 9.4 Study 6: Mean (SD) Brand Choice scores. High scores represent preference for a celebrity brand.

	Overall	Well-Liked Celebrity	Known Celebrity
eight-years (n=46)	1.54 (.67)	1.67 (.73)	1.41 (.59)
10-years (n=38)	1.64 (.93)	1.63 (.95)	1.68 (.95)
12-years (n=44)	1.67 (.87)	1.77 (.88)	1.57 (.87)
14-years (n=46)	1.48 (.86)	1.15 (.88)	1.73 (.78)

There was no significant preference for celebrity brands as a whole. Looking across the two different groups (well-liked vs known) there were also no significant main effects of celebrity group for any of the individual age groups.

Delayed explicit brand preference (Week 3)

To examine whether explicit preferences from Week 2 remained in Week 3, a 2 (celebrity group – well-liked vs known) x 2 (presentation type – celebrity vs brand alone) x 4 (age group) ANOVA was conducted. The means (SD) can be seen in the following table.

Table 9.5 Study 6: Mean (SD) delayed Explicit Brand Preference for brands presented with a celebrity and brands presented alone for each age group (Week 3).

	Well-Liked Celebrities			Know	n Celebrities	
	Explicit	Explicit	p	Explicit	Explicit	P
	Celebrity	Brand		Celebrity	Brand	
	Brand	Alone		Brand	Alone	
	Preference	Preference		Preference	Preference	
eight-years	5.80 (1.74)	5.52 (1.85)	.491	4.90 (1.61)	5.55 (2.09)	.163
(n=46)						
10-years	6.42 (1.32)	5.58 (1.98)	.120	5.87 (1.83)	5.42 (1.68)	.417
(n=38)						
12-years	6.59 (2.05)	5.46 (1.86)	.092	5.46 (1.71)	5.69 (1.36)	.651
(n=44)						
14-years	4.97 (1.73)	5.95 (1.92)	.044	5.97 (1.24)	5.62 (1.45)	.210
(n=46)						

As in Week 2, results only showed a significant interaction between presentation type, age group and celebrity group F(3,154) = 3.30, p = .02, $\eta p^2 = .06$. As before there was no main effect of celebrity group and no main effect of age.

Further exploratory t-test analyses with the Bonferroni adjustment applied to correct for the eight comparisons (p < .006) found that, as before **eight-year-olds**, **10-year-olds and 12-year-olds** showed no significant difference in preference between brand alone and well-liked celebrity brands and no significant difference between brand alone and known celebrity brands. For the **14-year-olds** the immediate preference seen in Week 2 disappeared and, at Week 3, they showed no difference in preference in either the well-liked or known celebrity condition. It appears as though any resistance to the well-liked celebrities in Week 2 had been lost one week later in the older age group - any immediate celebrity effect disappeared.

Scepticism

Two scepticism scales were presented in Study 6; a six-item accuracy-based scepticism scale and a five-item affect-based scepticism scale. Participants responded to the scales twice, once before testing (Week 1) and once after testing (Week 3). A reliability analysis was carried out on the scales pre- and post-testing using Cronbach's Alpha. The reliability of the accuracy-based scale reached an acceptable level before (Alpha = .698) and after testing (Alpha = .651). The five-item scale comprising the affect-based scale also reached an acceptable level (Alpha = .758 before; Alpha = .800 after) (Nunnally & Bernstein, 1994). Pre- and post-test Accuracy-Based and Affect-Based Scepticism means (SD) by age group are shown in Table 9.6.

Table 9.6 Study 6: Mean (SD) Accuracy-Based Scepticism and Affect-Based Scepticism scores pre- and post- brand presentation by age group. High scores represent high scepticism.

	Pre-te	est	Post-1	test
	Accuracy-Based Scepticism	Affect-Based Scepticism	Accuracy-Based Scepticism	Affect-Based Scepticism
eight-years (n=46)	2.36 (.47)	2.62 (.82)	2.33 (.64)	2.64 (.85)
10-years (n=38)	2.37 (.32)	2.44 (.49)	2.33 (.33)	2.47 (.54)
12-years (n=44)	2.25 (.40)	2.48 (.51)	2.21 (.28)	2.57 (.57)
14-years (n=46)	2.39 (.38)	3.05 (.52)	2.47 (.32)	3.00 (.53)
Whole sample	2.34 (.40)	2.65 (.66)	2.34 (.44)	2.67 (.67)

To examine accuracy-based scepticism before and after presentation a 4 (age) x 2 (test time) mixed ANOVA was run with age as the between subjects variable and (test time) (pre- vs. post-study) as the repeated measure. Findings showed no main effect of test time, with accuracy-based scepticism scores being identical (M = 2.34) both before and after the study.

There was also no main effect of age and no significant interaction between accuracy-based scepticism and age.

To examine affect-based scepticism before and after presentation a 4 (age) x 2 (test time) mixed ANOVA was run with age as the between subjects variable and test time (prevs. post-study) as the repeated measure. Findings showed no main effect of test time, with affect-based scepticism scores being almost identical both before (M = 2.65) and after (M = 2.67) the study and there was no significant interaction between affect-based scepticism and age. However, there was a significant main effect of age F(3,158) = 9.74, p < .001, $\eta p^2 = .15$, with 14-year-olds displaying a higher level of affect-based scepticism (M = 3.03) than the other age groups (all p < .005).

Correlational and regression analyses

Because there was no significant difference in scepticism (accuracy-based or affect-based) pre- to post-testing, each scale was collapsed to create one overall Accuracy-Based Scepticism score and one overall Affect-Based Scepticism score for the correlational and regression analyses. Analyses were conducted separately for both the Well-Liked Celebrity group and the Known Celebrity group.

1. Well-Liked Celebrity group

Correlation analyses were conducted on the overall sample (n = 83) with Accuracy-Based Scepticism, Affect-Based Scepticism, Well-Liked Celebrity Brand Preference, Brand Alone Preference, Implicit Brand Preference and Brand Choice as variables.

Table 9.7 Study 6: Correlational table showing Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Well-Liked Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice for the Well-Liked Celebrity group.

	1.	2.	3.	4.	5.	6.
1. Accuracy- Based Scepticism	-					
2. Affect- Based Scepticism	.503**	-				
3. Well-Liked Celebrity Brand Preference	297**	339**	-			
4. Brand Alone Preference	287**	247*	.113	-		
5. Implicit Brand Preference	098	109	.200*	.053	-	
6. Brand Choice	016	132	.435**	423**	.141	-

^{**} significant at p < .01

Correlational results showed a positive relationship (r = .503, p < .001) between Accuracy-Based and Affect-Based Scepticism, which was to be expected - higher accuracy-based scepticism was associated with higher affect-based scepticism. Both Explicit Well-Liked Celebrity Brand Preference (r = -.297, p = .005) and Explicit Brand Alone Preference (r = -.287, p = .006) had a negative relationship with Accuracy-Based Scepticism showing that higher accuracy-based scepticism is related to lower well-liked celebrity explicit preference and brand alone explicit preference. This matches the results of the young adult sample in Study 3 where higher accuracy-based scepticism was related to lower celebrity brand preference. Similarly, both Explicit Well-Liked Celebrity Brand Preference (r = -.339, p = .001) and Explicit Brand Alone Preference (r = -.247, p = .016) had a negative relationship with Affect-Based Scepticism, again showing that higher affect-based scepticism was related to lower well-liked celebrity explicit preference and brand alone explicit preference. These

^{*} significant at p < .05

results show that both types of scepticism (accuracy-based and affect-based) are related to brand responses more generally - regardless of whether a celebrity is present.

In terms of Brand Choice score, there was a negative relationship (r = -.423, p < .001) between Explicit Brand Alone Preference and Brand Choice score indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In contrast a positive relationship (r = .435, p < .001) between Explicit Well-Liked Celebrity Brand Preference and Brand Choice was found indicating that as the celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites. This also matched the results of the young adult sample in Study 3. Interestingly there was also a positive relationship (r = .200, p = .043) between Implicit Preference and Explicit Well-Liked Celebrity Brand Preference demonstrating that explicit preference for well-liked celebrity brands is related to implicit preference also.

To examine the factors predicting brand choice in the well-liked celebrity group a regression analysis for the well-liked celebrity group including Brand Choice as the DV and Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Well-Liked Celebrity Brand Preference, Explicit Brand Alone Preference and Implicit Brand score as the 5 IVs was conducted. The results can be seen in Table 9.8.

Table 9.8 Study 6: Regression analysis. Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Well-Liked Celebrity Brand Preference, Explicit Brand Alone Preference and Implicit Brand Preference as predictors of Brand Choice score.

	Beta	T	Sig.
Accuracy-Based Scepticism	.041	.376	.708
Affect-Based Scepticism	115	-1.052	.297
Well-Liked Celebrity Brand Preference	.450	4.534	.001
Brand Alone Preference	494	-5.165	.001
Implicit Brand Preference	.069	.739	.463

Using the enter method it was found that the five IVs explain a significant amount of the variance in the final brand choice F(5,74) = 10.37, p < .001, $R^2 = .43$, $R^2_{Adjusted} = .39$. The analysis shows that both Accuracy-Based Scepticism and Affective-Based Scepticism and Implicit Brand Preference did not significantly predict final Brand Choice, however Explicit Well-Liked Celebrity Brand Preference and Explicit Brand Alone Preference were significant predictors.

2. Known Celebrity group

Correlation analyses were conducted on the overall sample (n = 91) with Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Known Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice as variables.

Table 9.9 Study 6: Correlational table with Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Known Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice for the Known Celebrity group.

	1.	2.	3.	4.	5.	6.
1. Accuracy- Based Scepticism	-					
2. Affect- Based Scepticism	.444**	-				
3. Known Celebrity Brand Preference	065	.102	-			
4. Brand Alone Preference	080	215*	.153	-		
5. ImplicitBrandPreference	065	022	106	013	-	
6. Brand Choice	062	.055	.338**	409**	.012	-

^{**} significant at p < .01

Correlational results show that, as expected and consistent with previously reported studies, high levels of Affect-Based Scepticism are related with higher levels of Accuracy-Based Scepticism (r = .444, p < .001). In the known celebrity group Affect-Based Scepticism was negatively related to Explicit Brand Alone Preference (r = -.215, p = .023) highlighting that higher levels of affect-based scepticism are related with lower explicit brand alone preference. This is a different finding to the well-liked celebrity group where the negative

^{*} significant at p < .05

influence of scepticism was seen across all brand preferences (both celebrity brands and brand alone). In the well-liked celebrity group both accuracy-based and affect-based scepticism were negatively correlated with both explicit celebrity brand preference and explicit brand alone preference. The findings of the known celebrity subgroup seem to suggest that a known celebrity overrides scepticism.

In terms of Brand Choice score, there was a negative relationship (r = -.409, p < .001) between Explicit Brand Alone Preference and Brand Choice score indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In contrast a positive relationship (r = .338, p = .001) between Explicit Celebrity Brand Preference and Brand Choice was found indicating that as the celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites. Again, this is a finding showing to be consistent throughout these studies.

To examine whether Accuracy-Based Scepticism and Affect-Based Scepticism and Explicit Known Celebrity Brand Preference and Explicit Brand Alone Preference in the known celebrity group predicts brand choice a regression analysis for the known celebrity group including Brand Choice as the DV and Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Known Celebrity Brand Preference, Explicit Brand Alone Preference and Implicit Brand Preference as the 5 IVs was conducted. The results can be seen in Table 9.10.

Table 9.10 Study 6. Regression analysis. Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Known Celebrity Brand Preference, Explicit Brand Alone Preference and Implicit Brand Preference as predictors of Brand Choice score.

	Beta	T	Sig.
Accuracy-Based Scepticism	037	364	.716
Affect-Based Scepticism	077	730	.468
Known Celebrity Brand Preference	.424	4.514	.001
Brand Alone Preference	493	-5.221	.001
Implicit Brand Preference	.047	.513	.610

Using the enter method it was found that the five IVs explain a significant amount of the variance in the final Brand Choice F(5,85) = 8.38, p < .001, $R^2 = .34$, $R^2_{Adjusted} = .30$. The analysis shows that both Accuracy-Based Scepticism and Affective-Based Scepticism and Implicit Brand Preference did not significantly predict final Brand Choice, however Explicit Known Celebrity Brand Preference and Explicit Brand Alone Preference were significant

predictors, and so despite the different pattern of correlations the significant predictors are the same as the well-liked group.

9.4 Discussion

In contrast to the results of Study 5 where children had an explicit preference for brands presented alone over brands presented with a known celebrity, Study 6 found that children aged eight-, 10- and 12-years showed no significant difference in explicit preference for brands presented alone or with known celebrity brands. This finding was also found in the well-liked celebrity group and children aged eight- to 12-years had no preference for either set of brands. The 14-year-olds in both groups, however, discriminated in their brand judgments dependent upon whether or not they were presented with celebrities. For the 14-year-olds in the well-liked celebrity group there was a significant explicit preference for brands presented alone over brands paired with a well-liked celebrity, and in the known celebrity group there was a significant explicit preference for celebrity paired brands over brands presented alone. Interestingly, the 14-year-olds in the well-liked celebrity group seemed to show resistance in their immediate responses to the celebrity effect – something which was expected of the young adults in Studies 1 to 3.

Evidence of the celebrity effect being maintained in explicit preferences was not shown, however, with the 14-year-olds showing no significant difference between brands presented alone or with a celebrity when tested again one week later. This suggests that whilst older children can recognise the manipulation attempt of the well-liked celebrity, and trigger explicit resistance to this, later testing of the brand does not seem affected. It could be possible that after a lengthy delay, disassociations between the brand and liked celebrity are made when the celebrity is not later presented with the brand which could have implications for the overall effectiveness of advertisements. However, it is important to consider that pairing of the celebrities with brands occurred only once throughout this study. In real life, ads which include celebrities are repeated with the intention of strengthening the association between celebrity and brand. Future research should explore whether this leads to scepticism being overridden or whether resistance in those with higher scepticism is being strengthened. Conclusions cannot be drawn for either suggestion within the results of the current study.

In relation to the well-liked celebrity subgroup, explicit brand preference and implicit preference results showed that, overall, children with lower explicit celebrity preference were more likely to have lower implicit preference for well-liked celebrity paired brands also. As predicted by Rozendaal, Buijs et al. (2016), this finding supports the notion that dual processes interact and that associational implicit preferences could be triggered if recognition of manipulation and persuasion occurs. It was further predicted that this might be found in the older children only, where a more sophisticated understanding of celebrity advertising is present. Subsequent analysis (discussed in the following chapter) shows this relationship only exists in the older children's group.

In Study 3 implicit scores of young adults were negatively correlated with affect-based scepticism, suggesting that those with higher levels of affect-based scepticism had

lower implicit preference for well-liked celebrity brands – a finding which has not been replicated in the current study. However, this study has found that higher levels of affect-based scepticism was related to lower explicit celebrity paired brand preference, suggesting that affect-based scepticism could go some way to explaining how adults are able to consciously defend against the celebrity effects. According to Greenwald and Banaji (1995) implicit cognitions are derived from past experiences, with Gawronski and Bodenhausen (2011) distinguishing between implicit and explicit processing by proposing that implicit evaluations are based upon the activation of simple associations in memory which result in positive or negative affective responses - "gut reactions". Explicit evaluations, on the other hand, are based upon propositional processes and involve the validation of information through the application of conscious thought and logic, meaning that a high level of cognitive resource may be needed.

As Rozendaal, Buijs et al. (2016) propose, it seems likely that the celebrity effect in advertising results mainly from the triggering of implicit, associative evaluations. Recognising manipulation triggers negative feelings which then impact on attitude and scepticism, so a negative implicit response is then picked up on in explicit responses. This didn't seem to happen in the sample of young adults in Study 3 as no relationship between affect-based scepticism and explicit responses was found, yet higher levels of affect-based scepticism in the children in Study 6 was related to lower explicit celebrity paired brand preference. In Study 6, children were asked to make prior evaluations of the celebrities and brands (one week before the explicit and implicit preference testing), and it could be argued that this may have encouraged engagement with propositional evaluations. At the time of testing, recognition of manipulation could have triggered feelings which impacted on attitudes and scepticism against the celebrity, which then transferred to children's explicit preferences. If this is the case then this has implications for the way in which advertising operates and, if Heath's (2012) view is correct, it may be that to some degree the success of celebrity endorsement rests upon not encouraging consumers to engage in explicit propositional evaluation of advertisements where celebrity endorsement occurs. In line with the cognitive defence view, the relationship between affect-based scepticism and explicit celebrity brand preference should only be seen in the older children who are able to recognise the manipulation attempt. This is a finding which emerges in the following chapter.

A further suggestion to explain the difference across findings from the young adults of Study 3 and the children of Study 6 could be that having conscious awareness of our own level of affect-based scepticism may be a determinant of whether resistance to the celebrity effect is possible. This is explained in further detail later in the discussion. Alternatively, it could be possible that resistance to the celebrity effect occurs in either explicit preferences *or* implicit preferences, but not both.

Taking into account the responses of eight- to 14-year-old children, correlational results from the well-liked celebrity group showed some similarities to results previously seen with young adults. Higher accuracy-based scepticism was associated with higher affect-based scepticism which was to be expected. Those with higher accuracy-based scepticism tended to rate well-liked celebrity brands and brands presented alone lower, a finding that

matches the results of the young adult sample in Study 3 where higher accuracy-based scepticism was related to lower explicit celebrity brand preference. Similarly, results showed that higher affect-based scepticism was related to lower well-liked explicit celebrity preference and explicit brand alone preference, again flagging the importance of scepticism (both accuracy-based and affect-based) in triggering resistance to brands. In the overall sample of children in the known celebrity group results showed that higher levels of affect-based scepticism was related to lower explicit brand alone preference. Whilst this specific finding matches the results of the well-liked celebrity group, in the well-liked celebrity group the negative influence of scepticism was seen across all brand preferences (celebrity and brand alone). For the known celebrity subgroup, scepticism was not related to explicit celebrity brand preference, suggesting that the influence of known celebrities may have overridden scepticism.

In terms of final brand choice selections, regression analyses found that both wellliked explicit celebrity brand preference and explicit brand alone preference were significant predictors of overall brand choice. This finding was also conclusive in the correlations which found that as well-liked celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites. This again matched the results of the young adult sample in Study 3. There was also a negative relationship between explicit brand alone preference and brand choice score indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. Furthermore, and in additional support of the results of Study 3, results found that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In terms of brand choice score results of the known celebrity group, results indicate that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. This was supported in the regression results which found that known celebrity brand and brand alone scores were significant predictors of brand choice. As the celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites. Again, this is a finding showing to be consistent throughout all of the studies.

The following chapter explores these effects by age group and offers new models of responses to celebrity advertising.

10 Modelling the findings of Study 6

To explore the developmental nature of the effect celebrity advertising and scepticism have on explicit and implicit brand preference and overall brand choice, further correlational analyses were conducted by age group - for younger children (aged eight- to 10-years) and older children (aged 12- to 14-years) for both the well-liked and known celebrity conditions. The findings have been depicted in new models of responses to celebrity advertising.

10.1 Well-Liked Celebrity group by age

Overall correlational results for the whole sample of the well-liked celebrity group (see Table 9.7, page 126) indicated a positive relationship (r = .200, p = .043) between Implicit Brand Preference and Explicit Celebrity Brand Preference demonstrating that higher explicit preference for well-liked celebrity brands was also related to higher implicit preference. The 14-year-old children in the well-liked celebrity group had a significant explicit preference for brands alone over celebrity brands, so to explore whether the older age group were carrying the responses of the whole sample, further correlations by age group were conducted. The sample was divided into an older age group (children aged 12- to 14-years) and a younger group (children aged eight- to 10-years) to examine further the relationships between all of the variables included in the correlational analysis for Study 6. Looking back at literature in section 1.1, it is assumed that children aged 12-years and over have a sophisticated understanding of advertising, and therefore the children aged 12-years in this sample were included in the "older" children group. Results for the older children can be seen in Table 10.1 and Figure 10.1.

Table 10.1 Study 6: Correlational table showing Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Well-Liked Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice for the 12- to 14-year-olds in the Well-Liked Celebrity group.

	1.	2.	3.	4.	5.	6.
1. Accuracy- Based Scepticism	-					
2. Affect-Based Scepticism	.545**	-				
3. Well-Liked Celebrity Brand Preference	420**	543**	-			
4. Brand Alone Preference	237	.008	.159	-		
5. Implicit Brand Preference	199	225	.318*	.011	-	
6. Brand Choice	122	333*	.532**	384*	.224	-

^{**} significant at p < .01

When looking at the correlations of the older age group (aged 12- to 14-years-old) a positive (r=.545, p<.001) relationship between Accuracy-Based and Affect-Based Scepticism was found again, as expected. Negative relationships between Explicit Celebrity Brand Preference and both Accuracy-Based Scepticism (r=-.420, p=.006) and Affect-Based Scepticism (r=-.543, p<.001) have been found, demonstrating that children with increased scepticism (both accuracy-based and affect-based) have lower explicit preferences for brands paired with well-liked celebrities. However, the significant relationships between both Accuracy-Based Scepticism and Affect-Based Scepticism and Brand Alone Preference seen in the overall group disappeared. For the older children, the negative influence of scepticism was only seen when a celebrity was present.

^{*} significant at p < .05

In terms of Brand Choice score, there was a negative relationship (r = -.384, p = .012) between Explicit Brand Alone Preference and Brand Choice score indicating that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In contrast a positive relationship (r = .532, p < .001) between Explicit Celebrity Brand Preference and Brand Choice was found indicating that as the celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites. This also matched the results of the young adult sample in Study 3. Additionally, there was a negative relationship between Affect-Based Scepticism and Brand Choice (r = -.333, p = .031) which fits with the finding that the 14-year-olds had higher affective scepticism than younger children.

There was a positive relationship between Explicit Celebrity Brand Preference and Implicit Brand Preference (r = .318, p = .043) highlighting that children with lower explicit celebrity preference were more likely to have lower implicit preference for well-liked celebrity paired brands also. This correlational relationship makes sense when we consider the previous finding that 14-year-olds had an implicit preference for brands presented alone rather than brands presented with a celebrity. These correlational results can be seen depicted in Figure 10.1.

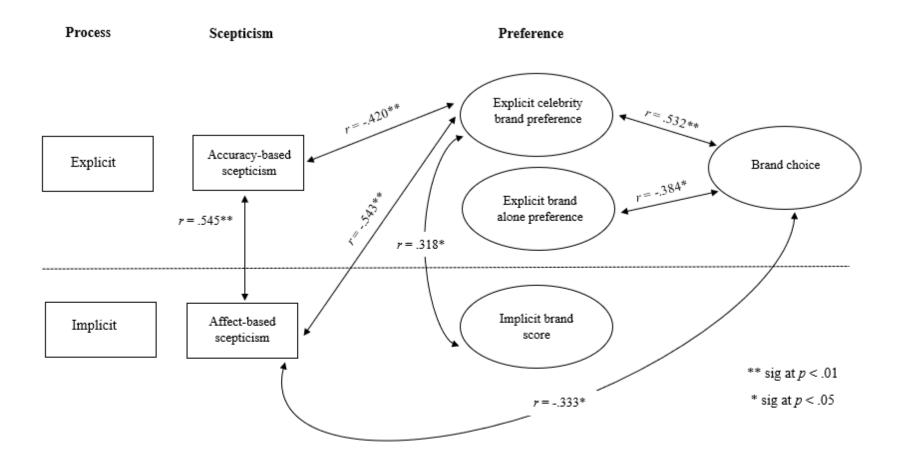


Figure 10.1 12- to 14-year-old children's responses to well-liked celebrity advertising.

Figure 10.1 highlights some key findings of the older children's responses to celebrity advertising when the celebrity was considered to be well-liked. In comparison to the correlational results of the overall sample where scepticism (both accuracy-based and affect-based) was negatively related to both explicit celebrity brand preference and explicit brand alone preference, the older children only showed a negative relationship between scepticism and explicit celebrity brand preference. This suggests that for older children scepticism is only effective when a celebrity is present, contradicting developmental literature which suggests that children aged 12-years and older should be at a cognitive ability to recognise and defend against advertising more generally. It could be argued here that older children do not recognise brands without celebrities to be a cause for concern. It is possible that because of the nature and presence of everyday advertising children of this age could have become accustomed to it and don't attempt to raise the defences every time they encounter it. When a celebrity appears with a brand that is notable because this alerts them to the manipulation attempt.

It was concluded in Study 3 that, at least in adults, it is their propositional reasoning about ads involved in accuracy-based scepticism which counteracts the celebrity effect in an explicit way. Results from Study 6 show that older children in the well-liked celebrity condition with higher affect-based scepticism were less likely to choose a celebrity brand as one of their final brand choices, which shows that gut-feeling affective responses are driving the judgments of older children. It could be that a high level of affect-based scepticism is also necessary for resistance to the celebrity effect to be effective. Throughout the analyses of Study 6, both accuracy-based and affect-based scepticism have had the same relationship(s) with the other variables being analysed. For example, if accuracy-based scepticism was related to explicit celebrity brand preference, then the same relationship was also found for affect-based scepticism. Furthermore, both accuracy-based and affect-based scepticism have continually been positively related to each other. This suggests that explicit preferences are largely guided by both conscious thoughts (scepticism) concerning advertising, as well as our "gut feelings" (affect-based scepticism). The only exception to this that has been seen thus far in the thesis is the relationship between affect-based scepticism and brand choice. For the well-liked celebrity group of Study 6, older children with higher levels of affect-based scepticism tended to choose celebrity brands less in their final brand choice - the same relationship did not emerge with accuracy-based scepticism. This finding is in contrast to what we may expect from considering the celebrity eclipsing literature. Ilicic and Webster (2014) found that where the presence of a celebrity becomes the focal point of the advert, strong celebrity attachment (affective responses) enhances brand attitude. We may therefore have expected the liking of the celebrity to show in their brand choices. However, whilst findings of Goldsmith et al. (2000) have shown that endorser credibility influences both attitude towards the brand and purchase intention, La Ferle and Choi (2005) argue that this only occurs when a celebrity is considered to be a credible endorser for the brand being endorsed. It could therefore be argued that the older children in this sample did not consider the celebrity and brand to "fit" which may have altered their brand preferences.

Celebrity endorsement has been seen to operate best under conditions of low involvement because a risk to its effectiveness occurs when the targeted audience is encouraged to consciously reflect upon the intentions behind the ad under conditions of high involvement / high elaboration likelihood. Heath (2012) has argued that when the potential for conscious cognitive elaboration of advertising material is high, consumers are much more likely to process that material critically and therefore advertising may be less effective. For example, when presented with celebrity endorsement, consumers engaging in conscious reflection might become more alert to the possibility that their feelings are being manipulated by the use of a celebrity, recognise the irrelevance of the celebrity to an objective evaluation of the product and resist the intentions of the advertiser. It could therefore be argued that proportional processes had been activated and the intentions of the celebrity and the ad triggered associational processes which led to negative affective associations. This would fit with the findings suggesting that the use of celebrities is more effective under conditions of low involvement (e.g., Choi et al, 2005) and further offers support for the suggestion that where an ad contains no product information to process, we may rely on our affective attitude. Explicit preferences and brand selections may therefore alter if a general dislike for ads is held, and therefore this sample of children may have lowered celebrity brand selections because they hold a general negative affective response towards celebrity ads. Furthermore, whilst young adults may hold a positive feeling towards a particular celebrity, it could be that they have a strong dislike for this celebrity being used in advertisements. According to the cognitive defence view, older children can engage in a "stop and think" process, and it could be that recognition of a well-liked celebrity being used as a manipulation attempt increases affective scepticism. This fits with the finding that 14-year-olds had higher levels of affectbased scepticism than the other age groups, which suggests that their general dislike for ads was related to their brand selections.

Results of the correlational analysis for the younger children (aged eight- to 10-year-olds) can be seen in Table 10.2.

Table 10.2 Study 6: Correlational table showing Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Well-Liked Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice for the eight- to 10-year-olds in the Well-Liked Celebrity group.

	1.	2.	3.	4.	5.	6.
1. Accuracy- Based Scepticism	-					
2. Affect- Based Scepticism	.510**	-				
3. Well-Liked Celebrity Brand Preference	260	138	-			
4. Brand Alone Preference	442**	548**	.083	-		
5. Implicit Brand Preference	.057	.066	.028	.131	-	
6. Brand Choice	.068	.021	.364*	426**	056	-

^{**} significant at p < .01

When looking at the correlations of the younger age group (aged eight- to 10-years-old) a positive (r = .510, p = .001) relationship between Accuracy-Based Scepticism and Affect-Based Scepticism was found, as expected. Negative relationships between both Accuracy-Based (r = -.442, p = .004) and Explicit Brand Alone Preference, and Affect-Based (r = -.548, p < .001) and Explicit Brand Alone Preference were shown, demonstrating that those with higher scepticism (both accuracy-based and affect-based) have lower preference for brands presented alone. This is a very different finding to the older children where higher scepticism (accuracy-based and affect-based) was related to lower explicit preference for celebrity brands only. For the younger children, therefore, their level of general ad scepticism was only related to how they responded to brands when the brand had not been paired with a celebrity. It could be that for the younger children the presence of a celebrity dampened the

^{*} significant at p < .05

effect of general ad scepticism due to celebrity eclipsing - it may be that where the presence of a celebrity became the focal point of the advert, strong celebrity attachment limited scepticism to be activated. This is in contrast to the older children where the presence of a celebrity may have heightened general ad scepticism.

Lastly, in terms of Brand Choice, correlations demonstrated a positive relationship (r = .364, p = .021) between Explicit Celebrity Brand Preference and Brand Choice yet a negative relationship (r = -.426, p = .006) between Explicit Brand Alone Preference and Brand Choice, demonstrating a higher preference for celebrity paired brands related to higher likelihood of selecting a celebrity brand as one of their three favourites. These correlational results can be seen depicted in Figure 10.2.

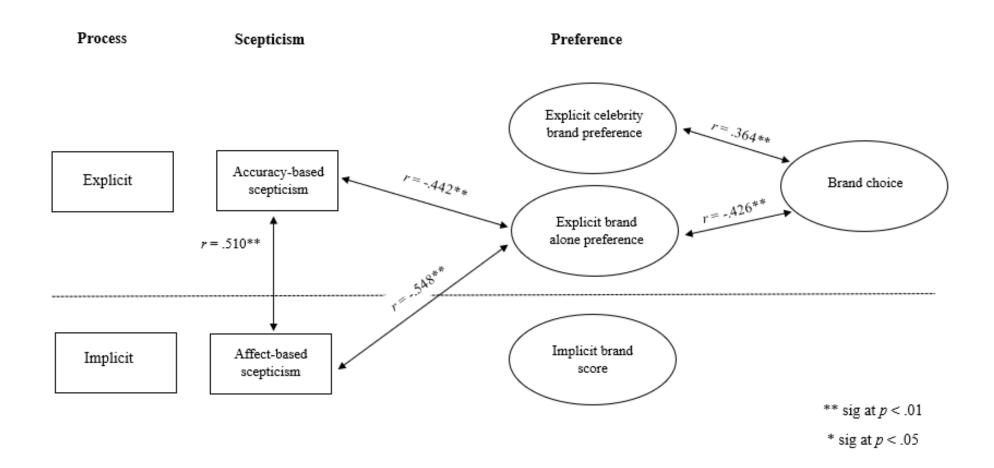


Figure 10.2 Eight- to 10-year-old children's responses to well-liked celebrity

Unlike the older children there was no relationship between well-liked celebrity explicit brand preference and implicit preference in the sample of younger children. Whilst Rozendaal, Buijs et al. (2016) suggest that both explicit and implicit responses interact, with recognition of manipulation triggering feelings impacting on attitudes and scepticism, cognitive developmental theories such as Piaget and Theory of Mind suggest that processing of advertisers' intention is limited in younger children. According to the cognitive defence stance, even if young children can process the intent adherent to advertising, they still have to connect up other responses to apply it in their defence. This connective process doesn't seem to occur in the same way in younger children, which explains why we find fewer correlational relationships in comparison to the older children. It is therefore not surprising that this relationship did not occur here - with an inability to consciously process the intent of the celebrity effect, there is no opportunity for the effects of manipulation to transfer to the implicit preferences.

Comparing the correlational results of the older children and younger children highlights some important findings. Table 9.7 (page 126) shows that in the overall sample of children in the well-liked celebrity subgroup, both accuracy-based scepticism and affect-based scepticism were negatively correlated with both explicit celebrity brand preference *and* explicit brand alone preference. As seen in Table 10.1 (page 134), the results of the older children show a negative relationship between scepticism (both accuracy-based and affect-based) and explicit celebrity brand preference only. In contrast, Table 10.2 (page 139) shows the opposite relationship for the younger children and both accuracy-based scepticism and affect-based scepticism were negatively related with explicit brand alone preference only. Whilst it could be argued that for the younger children the celebrity overrides scepticism, this seems unlikely, especially when older children had higher levels of scepticism. The correlational results of the young children here offer some support for the eight-year-olds in Study 5, who also had lower accuracy-based scepticism than the other age groups (which would be expected based on developmental literature) yet also had an explicit preference for brands presented alone.

Whilst the results of the overall sample indicate that scepticism does seem to offer a defence against brands, at least in brand preferences, it seems to operate in a different way in the younger and older groups when well-liked celebrities are involved. Despite this, neither accuracy-based nor affect-based scepticism were negative predictors of brand choice. Even though the correlational results show different patterns emerging for younger and older children, this is a consistent finding across the whole sample that neither accuracy-based nor affect-based scepticism predicts final brand choice. Whilst scepticism did not predict final brand choice, for the older children the correlational results did show a negative relationship between affect-based scepticism and brand choice suggesting that where affect-based scepticism was higher celebrity brands were chosen less frequently. Where an ad contains no product information to process, we may rely more on our affective attitude, and explicit preferences and brand selections may alter if a general dislike for ads is held. This is more likely where an ad contains no product information to process and reliance on affective attitudes are more prominent. Older children may have lowered celebrity brand selections because they hold a general negative affective response towards celebrity ads. This fits with

the finding that 14-year-olds had higher levels of affect-based scepticism than the other age groups, which suggests that their general dislike for ads was related to their brand selections. It could be that a high level of affect-based scepticism is also necessary for resistance to the celebrity effect to be effective.

10.2 Known Celebrity group by age

As with the well-liked celebrity group, correlations were re-run separating the sample into older children (aged 12- to 14-years) and younger children (aged eight- to 10-years). Results for the older children can be seen in Table 10.3.

Table 10.3 Study 6: Correlational table showing Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Known Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice for the 12- to 14-year-olds in the Known Celebrity group.

,	1.	2.	3.	4.	5.	6.
1. Accuracy- Based Scepticism	-					
2. Affect-Based Scepticism	.382**	-				
3. Known Celebrity Brand Preference	140	.074	-			
4. Brand Alone Preference	003	236	.182	-		
5. Implicit Brand Preference	241	.039	156	044	-	
6. Brand Choice	119	039	.251	251	.083	-

^{**} significant at p < .01

^{*} significant at p < .05

The only significant correlation present in the older age group demonstrates the relationship between Accuracy-Based and Affect-Based Scepticism (r = .382, p = .007). This is a consistent finding and is to be expected. This can be seen depicted in Figure 10.3. Whilst not quite significant, the correlations between Brand Choice and Explicit Preferences are in the expected direction showing a non-significant positive association between explicit known celebrity preference and celebrity brand choice, and a non-significant negative association between explicit brand alone preference and celebrity brand choice.

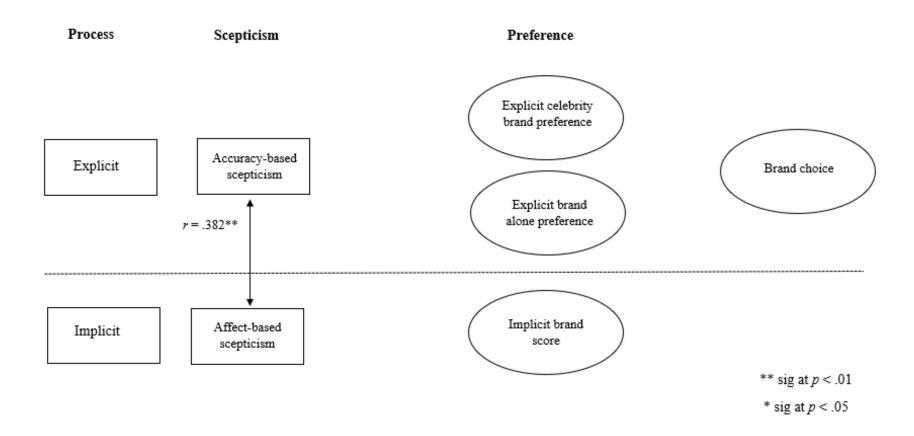


Figure 10.3 12- to 14-year-old children's responses to known celebrity advertising

Figure 10.3 highlights the lack of correlations between scepticism (accuracy- and affectbased), explicit celebrity brand preference, brand alone preference, and implicit brand score when the celebrities were simply known rather than well-liked. The correlations seen in the older children in the well-liked condition were not replicated here when brands were paired with known celebrities. Firstly, when the celebrity was well-liked, negative relationships emerged between scepticism (both accuracy-based and affect-based) and explicit celebrity (well-liked) brand preference, yet not explicit brand alone preference. This was a finding which also matched the results of the young adults in Study 3 who were also presented with well-liked celebrities. On the other hand, the results from the known celebrity group in Study 6 show that scepticism is not related to explicit celebrity brand preference nor explicit brand alone preference, meaning that the negative effect of scepticism did not emerge - even when a celebrity was present. This suggests that, for older children, the negative effect of scepticism is only shown when a celebrity is present, providing the celebrity is considered to be well liked. When discussing the results of the older children in the well-liked group it was alluded to the fact that older children may be immune to celebrity advertising, and it is only when they have an emotional response to the celebrity that scepticism is triggered.

The results presented here show that high levels of accuracy-based scepticism were also not correlated with explicit preferences - neither for celebrity brands nor brands alone. Whilst it was concluded in Study 3 that, at least in adults, it is their propositional reasoning about ads involved in accuracy-based scepticism which counteracts the celebrity effect in an explicit way, a discussion of the earlier results in Study 6 argued that a high level of affect-based scepticism could also be necessary for resistance to the celebrity effect to be effective. It could be suggested that the 14-year-olds responses are driven differently to those of the young adults in Study 3, with older children being driven more by affective feelings more than older participants.

When looking back at the results of the previous studies using known celebrities, both Study 4 (young adults, known celebrities) and Study 5 (older children, known celebrities) support the findings of the older children in Study 6 - there were no correlations present between scepticism and explicit brand alone preference, again adding support for the notion that the effects of scepticism are only seen when a celebrity is present. However, in Study 4 scepticism (generally) was negatively correlated with explicit celebrity brand preference, as was accuracy-based scepticism more specifically. This was a finding which also emerged in Study 5 - older children with a higher level of scepticism had lower explicit preferences for brands presented with celebrities. In both of these studies brands were presented with known celebrities and this celebrity was enough to trigger a negative relationship between scepticism and explicit celebrity brand preference, so we may have expected the same relationship to emerge in the known celebrity group of Study 6 - which we did not. Scepticism was only negatively related to explicit celebrity brand preference in the well-liked celebrity condition. This suggests that for older children, their "gut feeling" response to advertising is not triggered to the same extent when a known celebrity is presented with the brand. It could be possible to suggest that celebrities for whom they have no particular liking trigger little (or no) feelings of manipulation, meaning there is no response to transfer to explicit responses (Rozendaal, Buijs et al., 2016).

It is possible that the same relationships from Studies 4 and 5 concerning scepticism and explicit celebrity brand preference did not emerge in Study 6 because of the introduction of the affect-based scepticism scale. The results from Studies 4 and 5 discussed above refer to scepticism quite broadly, and don't encompass the importance of affect-based scepticism. As examined in the discussion of Study 6, it could be that having conscious awareness of our own level of affect-based scepticism may be a determinant of whether resistance to the celebrity effect is possible.

An alternative explanation as to why scepticism was related to explicit celebrity brand preference in Studies 4 and 5 yet not in the known condition of Study 6, is that risk to ad effectiveness occurs where the targeted audience is encouraged to consciously reflect upon the intentions behind the ad under conditions of high involvement. Heath (2012) has argued that when the potential for conscious cognitive elaboration of advertising material is high, consumers are much more likely to process that material critically and therefore advertising may be less effective. This may have been the case when the celebrities were known yet not particularly well-liked. It is possible that conscious thinking about the celebrity occurred and that the individual had to retrieve from memory where/when they have seen them previously. It is likely that this level of thought is much more likely to occur when the celebrity is known rather than when they are well liked - usually when presented with a celebrity we like we can recall who they are with minimal effort and thus little cognitive evaluation is needed.

The celebrities used in this study were selected on the basis that they should be known by the participants, yet they may not have any particular liking or disliking of them. Table 9.1 highlights that for the older children, the mean "liking" score for the known celebrities was 3.29 out of 9.00, which suggests that these celebrities may have actually been disliked. Till and Shimp (1998) found that whilst positive feelings towards a celebrity transfers to the brand (even under conditions of low effort), any future negative information of the celebrity lowers brand evaluations. This may have happened here. Further research into the effect of celebrity disliking on children's and young adult's brand preferences would drive this research forward.

Results for the younger children sample (eight-year-olds to 10-year-olds) can be seen in Table 10.4.

Table 10.4 Study 6: Correlational table showing Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Known Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice for the eight- to 10-year-olds in the Known Celebrity group.

	1.	2.	3.	4.	5.	6.
1. Accuracy- Based Scepticism	-					
2. Affect- Based Scepticism	.524**	-				
3. Known Celebrity Brand Preference	.030	.111	-			
4. Brand Alone Preference	094	146	.236	-		
5. Implicit Brand Preference	.056	.073	.039	123	-	
6. Brand Choice	.017	.119	.438**	555**	.024	-

^{**} significant at p < .01

Results for the eight- to 10-year-old group showed a significant positive correlation between Affect-Based Scepticism and Accuracy-Based Scepticism (r = .524, p < .001). The only other significant correlations for this age group in the known celebrity group were for Explicit Celebrity Brand Preference and Brand Choice (r = .438, p = .004) and Explicit Brand Alone Preference and Brand Choice (r = -.555, p < .001). Consistent with the other studies, these scores indicate that the higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In contrast as the celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites. Unlike Study 5 there was no negative correlation between explicit preference for celebrity paired brands and brands presented alone. These correlational results can be seen depicted in Figure 10.4.

^{*} significant at p < .05

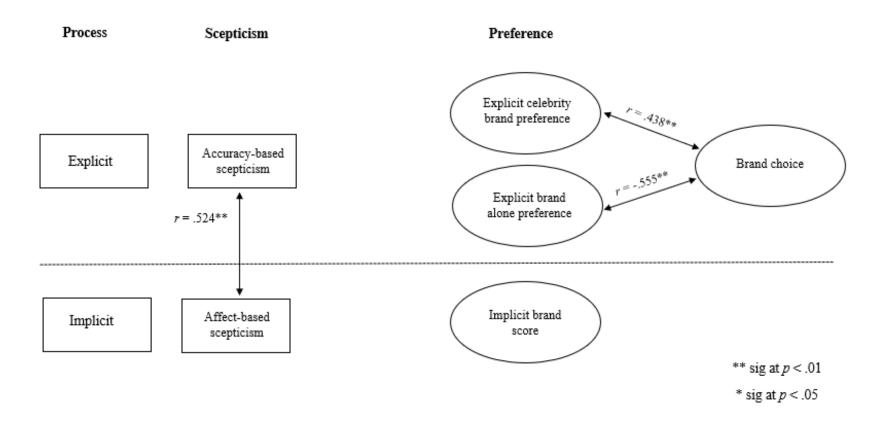


Figure 10.4 Eight- to 10-year-old children's responses to known celebrity advertising

The correlations seen in the younger children in the well-liked condition are not present here. In the well-liked celebrity condition, it was found that those with higher scepticism (both accuracy-based and affect-based) had lower explicit preference for brands presented alone. This finding did not emerge when the celebrity was simply known but not particularly well-liked, which tells us something about young children's thinking. In an advertising situation where a well-liked celebrity was present, young children's scepticism was negatively related to explicit brand choice, and so, whilst there was no relationship with explicit celebrity preferences, scepticism was triggered. This was not found when a known celebrity was used. No correlations emerged from this sample, demonstrating that the way in which young children think about the celebrity may have an effect on their explicit preferences. In this instance, when a known celebrity is presented it seems as though scepticism isn't triggered. This finding supports the results of Study 5. In the sample of young children in Study 5 (where known celebrities were used), scepticism was not related to explicit brand preferences.

10.3 "High" vs "Low" celebrity liking

Although the celebrities in the well-liked condition were initially rated significantly higher (indicating higher liking) than the known celebrities, there were individual differences and variation of scores in each group. Consequently, for each group the sample was split at the median to produce a "higher liking" and "lower liking" group. Results of Study 6 showed that for older children, the negative effect of scepticism is only shown when a celebrity is present, providing the celebrity is considered to be well liked. This suggested that older children may be immune to celebrities advertising brands, and it is only when they have an emotional response to the celebrity that scepticism is triggered. This was examined further by exploring the responses of children who had a very high celebrity liking in comparison to those with a lower level of celebrity liking. Correlational analyses were conducted to explore whether Celebrity Liking was related to Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Celebrity Brand Preference, Explicit Brand Alone Preference, Implicit Brand Preference and Brand Choice.

10.3.1 Well-Liked Celebrity condition

Across the sample of 83 children who participated in the well-liked celebrity condition, the median "liking" score for the celebrities was 6.00 out of 9.00. Participants were therefore allocated to one of two groups - those children who had a mean "liking" score lower than 6.00, and those who had a mean score of celebrity liking higher than 6.00.

Correlational analysis was conducted for each sub-group to explore whether Celebrity Liking was related to any of the variables previously measured. Looking at the "lower liking" group as a whole (n = 38) there were no correlations between Celebrity Liking and any of the other factors. In the "higher liking" (n = 45) group as a whole, higher Celebrity Liking was related to lower Affect-Based Scepticism (r = -.366, p = .013) and higher Explicit Celebrity Brand Preference (r = .421, p = .004) suggesting favourable responses to the presented

celebrity lowered "gut feeling" affect-based scepticism and increased explicit preference for celebrity brands. Because significant relationships occurred for the high liking group these responses were explored further by looking at the responses of the older and younger children separately. However, these analyses need to be treated with caution as the number of children in each age group was relatively small.

Older Children

In the sample of older children (aged 12- to 14-years) in the well-liked celebrity condition (n = 18), the median "liking" score was 5.25 out of 9.00 and therefore the data was split into high and low liking accordingly. Results of the correlational analysis can be seen in Table 10.5.

Table 10.5 Study 6: Correlational table showing Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Celebrity Brand Preference, Brand Alone Preference, Implicit Brand Preference, Brand Choice and Celebrity Liking (High) for the 12- to 14-year-olds in the Well-Liked Celebrity group.

	1.	2.	3.	4.	5.	6.	7.
1. Accuracy- Based Scepticism	-						
2. Affect-Based Scepticism	.575**	-					
3. Explicit Celebrity Brand Preference	527**	673**	-				
4. Explicit Brand Alone Preference	281	170	003	-			
5. Implicit Brand Preference	171	.032	.012	.026	-		
6. Brand Choice	128	318	.620**	448*	.126	-	
7. High Celebrity Liking	616**	569**	.448*	.307	064	.149	-

^{**} significant at p < .01

Higher Celebrity Liking was found to be negatively correlated to both Accuracy-Based Scepticism (r = -.616, p = .001) and Affect-Based Scepticism (r = -.569, p = .004) showing that the more sceptical older children were about advertising, the less they liked the celebrities. High Celebrity Liking was also positively correlated with Explicit Celebrity Brand Preference (r = .448, p = .028) showing that the higher celebrities were rated as being well-liked, the higher the preference for celebrity brands. However, further correlational analysis showed lower levels of Accuracy-Based (r = -.527, p = .008) and Affect-Based (r = -.673, p = <.001) Scepticism were related to a higher preference for Explicit Celebrity Brands.

^{*} significant at p < .05

In sum, having a higher initial liking for the celebrities was related to lower accuracy-based and affect-based scepticism which in turn was related to higher explicit preference for celebrity paired brands. This could suggest that scepticism was overridden. These findings fail to match the explicit brand preferences of the 14-year-olds who showed an explicit preference for brands presented alone. Whilst interpretations of these results need to be explored with caution due to the small sample size, it could be that the explicit brand alone preference was being carried by the children of this age who had a lower liking for the celebrities.

Alternatively, this finding can be said to offer further support for the earlier argument that where an ad contains no product information to process, reliance on affective attitude becomes important. Explicit preferences and brand selections may therefore alter if a general dislike for ads is held, and therefore this sample of children may have lowered celebrity brand selections because they hold a general negative affective response towards celebrity ads. Whilst older children may hold a positive feeling towards a particular celebrity, it could be that they have a strong dislike for said celebrity being used in advertisements. According to the cognitive defence view, older children can engage in a "stop and think" process, and it could be that in this instance recognition of a celebrity that is particularly favourable being used as a manipulation attempt increases affective scepticism.

Lastly, Explicit Celebrity Brand preference was positively correlated with overall Brand Choice (r = .620, p < .001) whilst Explicit Brand Alone preference was negatively correlated with overall Brand Choice (r = .448, p = .028) highlighting that an increased explicit celebrity brand preference is related to a higher likelihood of a celebrity brand being selected in final brand choice, whilst those with a higher preference for brands presented alone are less likely to select a celebrity brand in their final choice.

There were no significant correlations to report from the older children with lower celebrity liking. The absence of correlations offer support for the suggestion that older children may be immune to celebrity advertising, and it is only when they have an emotional response to the celebrity that scepticism is triggered. The children in this sample had lower liking to the presented celebrities and, as such, they may have been resistant to the celebrity effect. Furthermore, it was argued that when the celebrity was considered to be highly liked, older children may have a strong dislike for said celebrity being used in advertisements. This may not have been a concern for the children when the celebrity wasn't rated as highly liked.

Figure 10.5 incorporates high celebrity liking into the model of older children's responses to well-liked celebrity advertising.

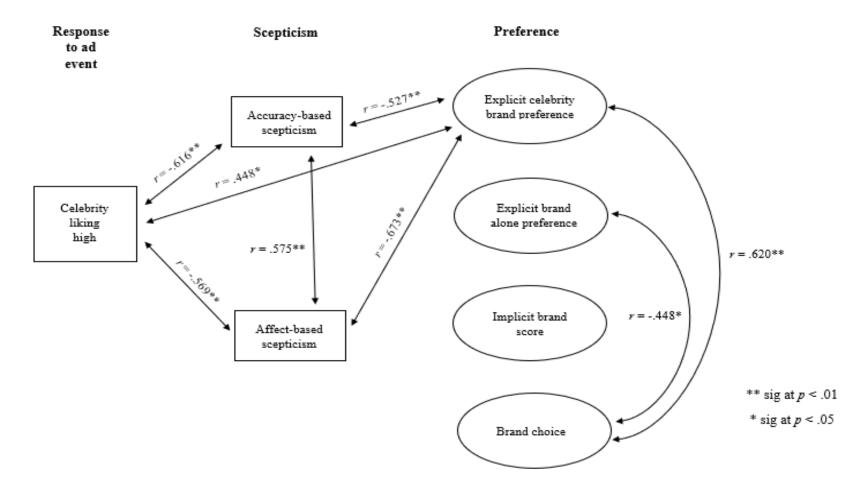


Figure 10.5 12- to 14-year-olds model of children's responses to highly rated, well-liked celebrity advertising

Younger Children

For the younger children (aged eight- to 10-years) in the well-liked celebrity condition (n = 21), the median "liking" score was 6.75 out of 9.00 and therefore the data was split into high and low liking accordingly. Results of the correlational analysis can be seen in Table 10.6.

Table 10.6 Study 6: Correlational table showing Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Celebrity Brand Preference, Brand Alone Preference, Implicit Brand Preference, Brand Choice and Celebrity Liking (High) for the eight- to 10-year-olds in the Well-Liked Celebrity group.

	1.	2.	3.	4.	5.	6.	7.
1. Accuracy- Based Scepticism	-						
2. Affect-Based Scepticism	.398	-					
3. Explicit Celebrity Brand Preference	.031	164	-				
4. Explicit Brand Alone Preference	389	289	.135	-			
5. Implicit Brand Preference	185	381	.299	.149	-		
6. Brand Choice	.475*	.008	.180	520*	.239	-	
7. High Celebrity Liking	.061	028	.663**	123	.156	.122	-

^{**} significant at p < .01

A positive correlation (r = .663, p = .001) was found between high Celebrity Liking and Explicit Celebrity Brand Preference in the younger children's group, showing that when a

^{*} significant at p < .05

celebrity is particularly well liked by young children they are more likely to show an explicit preference for brands paired with celebrities - regardless of their level of scepticism. Brand Choice and Explicit Brand Alone Preference were negatively correlated (r = -.520, p = .016) showing that the higher brands presented alone are rated, the less likely a celebrity brand is to be selected in their final brand choice. Brand Choice was further correlated with Accuracy-Based Scepticism (r = .475, p = .029) in this sample, showing that those with higher levels of accuracy-based scepticism were more likely to choose a celebrity brand in their final choice. In the findings reported here, celebrity liking was not related to an increase of scepticism, suggesting that contrary to the findings of Rozendaal, Buijzen et al. (2011) younger children may not fully understand the use and intent of using celebrities in ads. This fits with the idea that even if children of this age are sceptical about ads this seems to operate independently of their other judgments (i.e. not related to preference responses). In this instance they may have a high liking for the celebrities, which is connected to their explicit brand preference judgments, but it could be that they are not applying scepticism. Generally, in the younger group (Table 10.2) when well-liked celebrities were presented, their scepticism impacted on brand alone preference judgments (unlike the older children whose celebrity brand preference judgements were impacted). Although the correlations are not significant here (likely due to a small sample size), there is a trace of this relationship present.

The key difference with the older group for this analysis is that high celebrity liking is not related to low scepticism. Again, this can be explained using the celebrity eclipsing literature. As previously discussed, it could be that for the younger children the presence of a well-liked celebrity dampened the effect of general ad scepticism due to celebrity eclipsing - it may be that where the presence of a celebrity became the focal point of the advert, strong celebrity attachment limited scepticism to be activated. Interestingly, there were no significant correlations to report from the younger children with lower celebrity liking which suggests that for celebrity eclipsing to be effective, the celebrity needs to be well-liked. This may only be the case for younger children who have lower cognitive processing of ads in general and who may rely on superficial cues (for example celebrity endorsement) as the basis for their preferences. Figure 10.6 incorporates high celebrity liking into the model of younger children's responses to well-liked celebrity advertising.

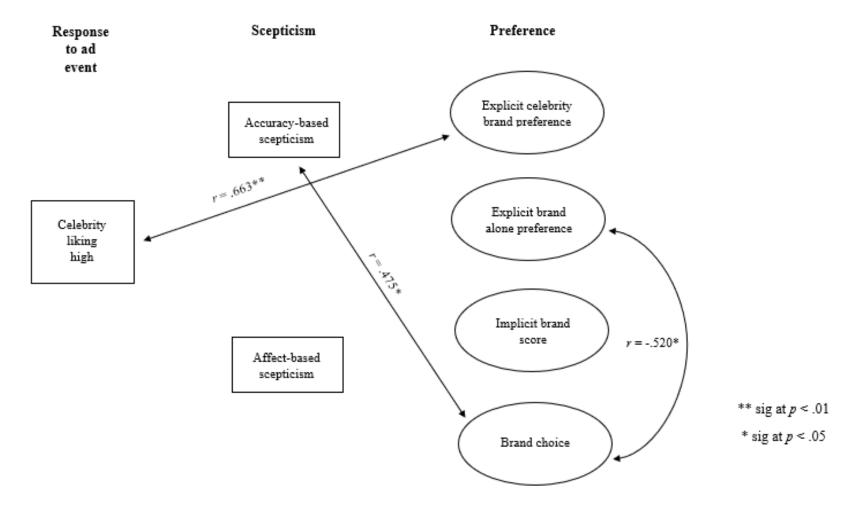


Figure 10.6 Eight- to 10-year-olds model of children's responses to highly rated, well-liked celebrity advertising

10.3.2 Examining the effect of high celebrity liking in Study 3

The results of Study 6 highlighted important findings surrounding the effect of "high" liking of well-liked celebrities, showing that for both younger and older children, having a high liking for a celebrity was directly related to an increased likelihood of an explicit preference for celebrity paired brands, even though the 14-year-olds in the well-liked condition in Study 6 had an explicit preference for brands presented alone. As discussed in Chapter 8, the scale used to test scepticism in young adults in Study 3 was divided into two subscales - three items which tested accuracy-based scepticism, and three items which tested affect-based scepticism. Using these two scales allows for the testing of the relationship between scepticism (both accuracy-based and affect-based) and high celebrity liking in the sample of young adults. In the older group of children in the well-liked celebrity group of Study 6 there was a negative association between scepticism and explicit brand preference, but despite this finding there was also a direct relationship between high celebrity liking and celebrity brand liking. It was suggested that this could mean that scepticism was possibly overridden. This is something which was explored further with the young adults of Study 3.

Correlational analyses were conducted to examine whether celebrity liking was related to any of the variables previously measured – Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Celebrity Brand Preference, Explicit Non-Celebrity Brand Preference, Implicit Brand Preference and Brand Choice. Due to the method used in Study 3 young adults were only presented with celebrities they had previously rated as being very well liked (mean = 8.04 out of 9.00) in an earlier stage of the study. Therefore, the initial celebrity ratings provided by all of the sample was used and there was no need for a median split. The initial results of Study 3 (see Table 5.5, page 73) showed that young adults scoring higher on the accuracy-based (but not affect-based) scepticism scale had a lower explicit preference for celebrity paired brands. This is in contrast to the older children of Study 6 where increased affect-based scepticism was negatively related to explicit celebrity brand preference. Additional results from the "high liking" analysis of the sample of young adults in Study 3 showed that, as with the older children, high Celebrity Liking was positively related to Explicit Celebrity Brand Preference (r = .396, p = .001). For both young adults (Study 3) and 14-year-olds (Study 6) there is a direct positive relationship between liking celebrities and liking brands paired with celebrities, but across the whole sample the adults showed no explicit resistance but the 14-year-olds did.

However, this leaves the question as to why the older children in Study 6 who would be assumed (according to developmental literature) to have a similar level of understanding to the young adults, did not respond in the same way to young adults. There are two credible explanations. Firstly, as discussed earlier in the thesis, it is possible to suggest that young adults didn't feel "advertised to" in Study 3, and therefore scepticism wasn't triggered. Secondly, for the young adults there was a relationship between accuracy-based scepticism and explicit brand preferences, whereas for the 14-year-olds there was an additional relationship between affect-based scepticism and explicit brand preferences. This could indicate that affect-based scepticism may be important when responding to a celebrity for whom individuals have a strong preference for, which adds further support for the discussion throughout this thesis that affect-based scepticism may be important for older children.

10.3.3 Known Celebrity Condition

Across the sample of 88 children who participated in the known celebrity condition, the median "liking" score for the celebrities rated was 3.65 out of 9.00. The data was therefore split into two groups - those children who had a mean "liking" score lower than 3.65, and those who had a mean score of celebrity liking higher than 3.65.

Correlational analysis was conducted to see whether celebrity liking was related to any of the variables previously measured – Accuracy-Based Scepticism, Affect-Based Scepticism, Explicit Celebrity Brand Preference, Brand Alone Preference, Implicit Brand Preference and Brand Choice. There were no significant correlations between celebrity liking and any of the other factors in the lower liking condition (n = 47) nor in the higher liking condition (n = 41). This was also true when the sample was further separated into older (12-to 14-year-olds) and younger (eight- to 10-year-olds) children.

10.4 Discussion

Modelling the results of the children's responses to celebrity advertising in Study 6 highlighted some important differences between the older and younger children. Taking the well-liked group first, looking at the results of the older age group (aged 12- to 14-years-old), results demonstrated that children with increased scepticism (both accuracy-based and affectbased) had lower explicit preferences for brands paired with well-liked celebrities only. The previous finding from the overall sample, which highlighted a negative relationship between scepticism and brand alone preference, was lost, suggesting that, for older children, scepticism is only effective when a celebrity is present. This contradicts developmental literature suggesting that children aged 12-years and older should have a developed cognitive ability to recognise and defend against advertising more generally. It could be argued that older children do not recognise brands without celebrities to be a cause for concern due to the fact that advertising is a common occurrence in their everyday lives. Furthermore, the correlational results showing that both accuracy-based and affect-based scepticism were negatively correlated with explicit celebrity brand preference only, could explain why 14year-old children in this study preferred brand alone over and above well-liked celebrity brands. This is a response which was expected, but not seen, in the young adults of Studies 1 to 3, which also looked at the effects of well-liked celebrities. It could be that high levels of both accuracy-based and affect-based scepticism are needed for explicit resistance to be possible.

The results of the older children in Study 6 flag some important differences when comparing to the younger children. Whilst the results of the older children highlighted relationships between scepticism and explicit celebrity brands, looking solely at the results of the children aged eight- to 10-years in the well-liked celebrity group, relationships showed that those with higher scepticism (both accuracy-based and affect-based) had lower explicit preference for brands presented alone. Both of these results fit with the explicit preferences of the younger age groups who had an explicit preference for brands paired with well-liked celebrities rather than brands presented alone, suggesting that accuracy-based and affect-based scepticism only appear to be effective on the explicit brand alone preferences in

children of this age. It could be that for the younger children, the presence of a celebrity dampened the effect of general ad scepticism due to celebrity eclipsing - it may be that where the presence of a celebrity became the focal point of the advert, strong celebrity attachment limited activation of scepticism. These results are in contrast to the older children, where scepticism was related to celebrity brands only. For older children in the sample, the presence of a celebrity may have heightened general ad scepticism. Given that the older children had higher levels of scepticism, it seems unlikely to infer that the celebrity effect was overridden in the younger sample. Instead, it could be argued that older children may have lowered celebrity brand selections because they hold a general negative affective response towards celebrity ads, highlighting that a high level of affect-based scepticism may be necessary for resistance to the celebrity effect to be effective.

Continuing to explore the well-liked celebrity condition, the correlational results of the young adults in Study 3 match those of the older children in the well-liked condition of Study 6, finding that accuracy-based scepticism was negatively related to explicit preference for celebrity brand preference score. However, there was no correlation between affect-based scepticism and celebrity paired explicit brand alone score in Study 3 - a finding which did emerge in the older children of Study 6. Furthermore, the results of the overall sample of children in the well-liked condition of Study 6 showed that affect-based scepticism was negatively related to explicit brand preference (celebrity brand and brand alone), which suggests that the more realistic ad situation in Study 6 might have triggered "gut-feeling" responses to influence the explicit judgments, and it occurred in those with high scepticism for all brands (not just celebrity brands). This could offer support for the fact that the two types of scepticism work together. Whilst the results of the overall (well-liked) sample of Study 6 indicated that scepticism does seem to offer a defence against brands, at least in brand preferences, it seems to operate in a different way in the younger and older groups when well-liked celebrities are involved. It was concluded in Study 3 that, at least in adults, it is their propositional reasoning about ads involved in accuracy-based scepticism which counteracts the celebrity effect in an explicit way, but it could be that a high level of affectbased scepticism is also necessary for resistance to the celebrity effect to be effective.

The correlations seen in the older children in the well-liked condition were not replicated when brands were paired with known celebrities, which suggests that, for older children, the negative effect of scepticism is only shown when a well-liked celebrity is present. When discussing the results of the older children in the well-liked group, it was alluded to the fact that older children may be immune to celebrity advertising, and it is only when they have an emotional response to the celebrity that scepticism is triggered. The lack of correlation in the known celebrity group offers further support for this suggestion, and it could be possible to suggest that celebrities for whom they have no particular liking trigger little (or no) feelings of manipulation in older children, meaning there is no response to transfer to explicit responses (Rozendaal, Buijs et al., 2016). It has also been suggested earlier in this thesis that having conscious awareness of our own level of affect-based scepticism may be a determinant of whether resistance to the celebrity effect is possible. Heath's model (2012) was also considered to be important, and it could be that when the celebrity was only known, and not necessarily liked, that children were encouraged to

consciously reflect upon the intentions behind the ad under conditions of high involvement. According to Heath, advertising may be less effective if consumers are encouraged to process advertising material critically.

Looking at the results of the younger children in the known celebrity group also shows that previous correlations seen in the well-liked condition are not present here. The correlations between higher scepticism (both accuracy-based and affect-based) and lower explicit preference for brands presented alone did not emerge when the celebrity was simply known but not particularly well-liked. This tells us something about young children's thinking and the way in which they think about the celebrity. When a celebrity was known it seems as though scepticism was not triggered, yet in an advertising situation where a well-liked celebrity was present, young children's scepticism was negatively related to explicit brand choice, and so, whilst there was no relationship with explicit celebrity preferences, scepticism was triggered.

Study 6 also correlated initial celebrity liking with explicit brand preference (celebrity and brand alone), implicit preference, scepticism (accuracy-based and affect-based) and brand choice. For the older children (12- to 14-years) it was found that those with particularly high liking for well-liked celebrities had lower levels of both accuracy-based and affectbased scepticism, with lower scepticism correlating with an increased explicit celebrity brand preference. Furthermore, high initial celebrity liking was positively correlated with explicit celebrity brand preference, indicating that having a high liking for a celebrity increases the likelihood of a celebrity brand being preferred when making explicit judgments. Importantly, there was a direct correlation between high celebrity liking (in the well-liked celebrity group) and explicit celebrity brand preference, which could suggest that scepticism may operate independently of brand judgments. This might lead us to expect an explicit celebrity brand preference, which did not occur, at least not in the 14-year-olds in the well-liked group. The findings of the 14-year-olds in this sample instead showed an explicit preference for brands presented alone. One explanation for this contrasting finding could be that in the initial analysis of explicit preferences and brand choice the overall sample of 14-year-olds in the well-liked condition (n = 20) were included, which contained some children who fell below the median split, therefore representing lower liking for the celebrities. This could have impacted on the results. Not all of these 20 children fell into the "high liking" group in the well-liked celebrity condition, and therefore the sample was considered to be too small to run further exploratory t-tests of explicit and/or implicit preference. A recommendation for future research would be to explore this further to examine whether those with a particular high liking to well-liked celebrities are more likely to have an explicit preference towards celebrity brands.

Matching the results of the older children, for the younger children in the sample, high liking for a well-liked celebrity was directly correlated with explicit celebrity brand preference, again, seemingly independent of scepticism scores. It could be that younger children do not recognise celebrities as being an attempt to persuade as Rozendaal, Buijzen et al. (2011) suggested, and therefore attempts to defend against such ads may not be made. However, unlike the older children, high celebrity liking was not related to low scepticism in

the younger children. This could be explained using the celebrity eclipsing literature. As previously discussed, it may be that for the younger children the presence of a well-liked celebrity dampened the effect of general ad scepticism due to celebrity eclipsing (Ilicic & Webster, 2014). Where the presence of a celebrity became the focal point of the advert, strong celebrity attachment could have limited scepticism to be activated.

When looking at celebrity liking in the known celebrity group, it may have been expected that a replication of the results seen in the well-liked celebrity group would be shown - those that rated celebrities more favourably (in the higher boundary of the median split) would show a reduction in scepticism, with lower scepticism being correlated with higher explicit celebrity brand preference. However, even those who rated the known celebrities highly (and therefore fell above the median split threshold) showed no relationship between celebrity liking and any of the other variables. For older children, the negative effect of scepticism was only shown when a celebrity is present, providing the celebrity was considered to be well liked. When discussing the results of the older children in the well-liked group it was alluded to that older children may be immune to celebrity advertising, and it is only when they have an emotional response to the celebrity that scepticism is triggered.

However, consideration of the median split values must also be mentioned here. In the overall sample, those in the well-liked celebrity group were considered to have high celebrity liking if their score fell above the threshold of 6.00, whereas the cut off for those in the known celebrity group was only 3.67. Therefore, whilst the celebrities in the known condition were rated as being highly liked (within that condition), the extent of this liking was far from matching that of those considered highly liked in the well-liked celebrity group. This could be important and suggests that high celebrity liking is only likely to be related to a lower level of scepticism when the celebrities are extremely well-liked (for example, the upper half of those in the well-liked celebrity condition).

This suggestion is supported by the results of the young adults in Studies 1 to 3, where there was a consistent explicit preference for celebrity paired brands. The computer programme in the earlier studies ensured that each participant was shown brands paired with a celebrity they had a very high liking for and, although it was expected that young adults would recognise the manipulation attempt and therefore utilise cognitive defences against them, the young adults consistently demonstrated an explicit preference for celebrity brands. It is likely that the model presented on page 154 (Figure 10.5) is relevant to the young adults here - very high celebrity liking was related to lower scepticism, which in turn was related to having a higher explicit liking for celebrity brands. However, there is an important consideration to raise here. The presentation format in Studies 1 to 3 used celebrity and brand pairing, whereas Studies 4 to 6 used a more realistic advertising board format commonly seen during celebrity interviews. So, it must still be considered that the young adults, whilst having a very high liking for the celebrities in the earlier studies did not feel "advertised to" and, as a result, scepticism was possibly not triggered. It would also be plausible to infer that, as with the children in Study 6, a high liking for celebrities could operate independently of scepticism and be directly related to an increase in celebrity paired brands.

Based on the developmental literature discussed throughout this thesis (see section 1.2), it would be reasonable to suggest that children aged 12- to 14-years, but not eight- to 10-year-olds, would be cognitively in line with their young adult counterparts and therefore act in a way in line with the results of Studies 1 to 3. Following this assumption, and based on the model presented (Figure 10.5, page 154) which shows that in the older children very high celebrity liking was related to lower scepticism, and lower scepticism was related to higher explicit celebrity brand preference, it may have been expected that, like the young adults in Studies 1 to 3, older children in the well-liked celebrity condition may also explicitly prefer celebrity brands - which they did not. There are two points here which could explain the disparity between the older children in the well-liked celebrity group of Study 6 and the young adult sample in Study 3.

Firstly, these findings could suggest that, like John (1999) proposed, the older children in this sample are not at an adult-like level of understanding in relation to celebrity advertising and therefore scepticism has not been utilised to guard against this. This would offer an explanation as to why the older children here are acting differently to the young adults in Studies 1 to 3. However, this does not fit with the general developmental literature, nor the findings of Rozendaal, Buijzen et al. (2011) who found that celebrity advertising is the first understood advertising tactic by even young children. Therefore, it is unlikely that this is a credible explanation. The initial hypothesis for Study 6 predicted that with the inclusion of a more realistic advertising presentation format, older children should be able to recognise persuasion and manipulation attempts, which in turn would lead them to explicitly prefer brands presented alone - which they did - at least in the sample of children presented with well-liked celebrities. However, it is difficult to explain this finding based on the current model and the conclusion that very high celebrity liking is related to lower scepticism, which should lead to higher explicit celebrity brand preference. Whilst it was concluded in Study 3 that at least in adults, it is their propositional reasoning about ads involved in accuracy-based scepticism which counteracts the celebrity effect in an explicit way, it could be argued that a high level of affect-based scepticism could also be necessary for resistance to the celebrity effect to be effective. It could be suggested that the 14-year-olds responses are driven differently to those of the young adults in Study 3, with older children being driven more by affective feelings more than older participants.

Secondly, a further explanation as to why the 14-year-olds' explicit preferences were in favour of brands presented alone (in the well-liked celebrity group), and therefore were in line with the *expected* explicit preferences of the young adults in Studies 1 to 3, could be attributed to the affect-based scepticism scale. In Studies 1 and 2 scepticism wasn't measured, and whilst it is likely that these young adults held a level of affect-based scepticism towards advertising, the fact that they weren't being asked about their views on scepticism in a standalone scale could have been detrimental to their ability (or inability) to resist the celebrity effect. Gawronski and Bodenhausen's APE model (2011) suggests that recognising an advertising campaign triggers propositional processing of the ad event where conceptual knowledge is activated, so the ad event is reflected upon. In sum, it could be argued that being made to reflect on their "gut feeling" and affect-based scepticism triggered conscious reflection of propositional conceptual ad understanding in the older children,

which then allowed resistance to the ad to be made on the basis of conceptual understanding. This explanation also goes some way to explaining why younger children had no preference for celebrity brands nor brands presented alone. With an underdeveloped ability to consciously reflect on the intent characteristic of celebrity advertising, scepticism may not have taken effect. This will be explored further in the general discussion. Although awareness of affect-based scepticism has not been measured in this study, a tentative suggestion of the results based on the findings of the studies reported in this thesis, have been included into the advertising model (see Figure 10.7, page 165).

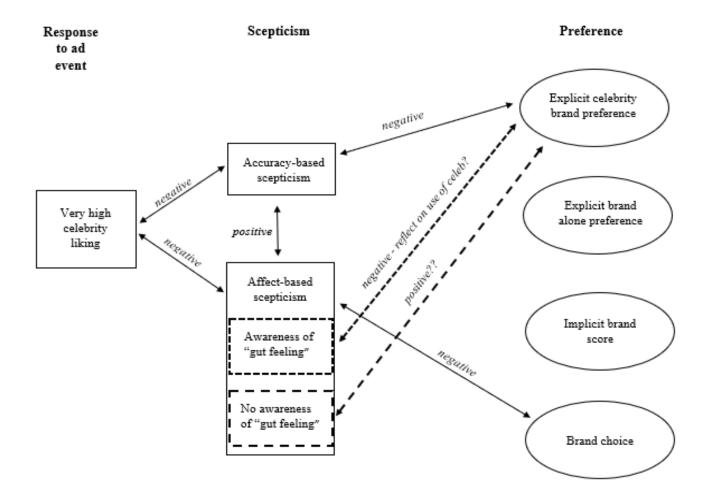


Figure 10.7 A suggested model of advertising acknowledging awareness of "gut feeling" scepticism

It is important to highlight here that affect-based scepticism is considered to be an associational process that taps into our "gut feelings", and therefore it needs to be questioned whether children reflecting consciously on their affect-based scepticism actually truly represents this measure, or whether once brought into conscious thinking it better represents a propositional process. Rozendaal, Buijs et al's (2016) research suggested that being warned about manipulative intent in an ad arouses individuals to the fact that they are being manipulated – a feeling which tends to be unpleasant and considered unfair. Consequently, attitudinal advertising literacy is activated which triggers negative and sceptical feelings towards ads. However, as well as considering affect-based, associational processing being brought into line with conceptual, propositional processing, it must also be considered that the opposite relationship may also represent the findings of this study. A counter argument may suggest that propositional processing was activated when considering the intentions of the ad, which then triggered associational processes linking recognition of a persuasion attempt which gave rise to negative affective associations. With this in mind, it would not be surprising to find that 14-year-olds in this study had an implicit preference for brands presented alone when considering the view of Rozendaal, Buijs et al. that conscious feelings of manipulation can manifest in implicit, associational processes also.

The results of the 14-year-old sample in this study also found that when tested one week later the previously significant preference for brands presented alone (in the well-liked celebrity condition) was lost, and there was no explicit difference between celebrity paired brands and brands presented alone. Whilst the scepticism scales were given to children again at this time of testing, children were not asked to rate the celebrities previously seen, nor was there any visual inclusion of the celebrities previously used. Therefore, in the absence of a highly rated celebrity, reliance on scepticism may have become more important and, with no celebrity to override scepticism levels, children may have instead relied more on their "gut feelings" which emerged from completing the affect-based scepticism scale. This could suggest that a high celebrity liking can operate separately to scepticism, but only when the celebrity is present and/or at the forefront of judgements. This wasn't examined in this study but would be an important factor to consider moving forward. It would be interesting to explore whether a reminder of the celebrities used, or a scale as a check of celebrity liking continued to override scepticism at a later time of testing maintains brand preference. This could have implications for the overall success of advertising campaigns - whilst TV ads, internet ads and billboards generally consistently show the celebrity and brand advertised together, individuals purchasing habits tend to rely solely on judging brands and products independent of celebrity images.

In conclusion, the results of this study have shown that for older children presented with well-liked celebrities, explicit preferences for brands presented alone were preferred over and above brands paired with celebrities. Furthermore, when these celebrities are considered to be "highly liked", scepticism (both accuracy-based and affect-based) was lower, with lower levels of scepticism being related to a higher explicit preference for celebrity paired brands. Very high celebrity liking was also related to an increased explicit preference for celebrity paired brand - a finding apparent in both younger and older children. However, resistance against the celebrity has been shown for the 14-year-olds in the well-

liked celebrity sample, and reasons for this have been discussed in relation to the findings of young adults in Studies 1 to 3. The same findings were not shown for the younger children, which calls into question whether recognition of the tactic behind celebrity advertising is understood by this age group, or whether the link between associational affect-based scepticism triggering propositional accuracy-based scepticism is linked as easily. Furthermore, the children in the known celebrity group showed no relationship between celebrity liking and scepticism. This will be explored further in the general discussion.

In relation to implicit preference, a positive relationship between well-liked explicit celebrity brand preference and implicit preference was found, demonstrating that as explicit celebrity preference increases so too does implicit preference. As predicted by Forehand and Perkins (2005), the implicit effect seems difficult to overcome. However, the 14-year-olds in the known celebrity group deviated from this finding and provided evidence of a dual-process approach. This sample of children showed an implicit preference for brands presented alone yet an explicit preference for celebrity brands. Overall, these results can be applied to both the findings of previous studies reported in this thesis, and literature discussing developmental trends in understanding. Making reference to some of the key literature and theories discussed in the literature review, the general discussion will bring together the six studies and provide interpretations of the main findings in accordance to the new proposed model of celebrity advertising. Furthermore, recommendations for future research will be discussed.

11 General Discussion

This chapter will bring together the findings of each of the six studies reported in this thesis and discuss how these can be used to inform our knowledge of children's and adults' understanding of celebrity advertising. In particular, this chapter will review the initial aims of the thesis and give a summary of its main findings, before discussing these in relation to key developmental literature. Strengths and limitations of this thesis will be addressed, before a discussion of the implications of the main findings and suggestions for future research. The unique contributions of this thesis are also explored.

11.1 Reviewing thesis aims

The research for this thesis was carried out due to the lack of developmental research exploring the nature of celebrity advertising and the effect it has on children's implicit and explicit brand judgments. One of the initial aims of this thesis was to examine the developmental trends of children's and young adults' advertising understanding by examining the case of celebrity advertising. Previous research and influential theories in this area have suggested that adults, but not children, have comprehensive knowledge of advertising intent. Theories of cognitive development (e.g. Piaget, Theory of Mind) and models such as the Persuasion Knowledge Model (PKM) which extended this work, suggest that children over 12-years (but not younger children) and adults understand persuasive intent inherent to advertising, and would predict that young adults would have no difficulty in defending against the celebrity effect, at least in their explicit judgments.

In line with this view, research such as that carried out by Forehand and Perkins (2005) found that when celebrities were identified in an ad, young adults would alter their explicit preferences against that of the celebrity (although resistance was not apparent in their implicit judgments). The traditional view of children's development would predict that for younger children (aged eight- and 10-years), due to limitations in their cognitive skills, their explicit preferences would be in favour of brands presented with a liked celebrity. More recently, this has been called into question by the work of Rozendaal, Buijzen et al. (2011) who suggested that even children as young as eight-years of age understood the tactic of celebrity advertising. If so, then even children of this age could show resistance to celebrity influence.

Because children's implicit responses have not been extensively investigated previously, it was recognised that this research was needed, and it was acknowledged that a dual-process model may be required. In terms of implicit preferences, two alternative hypotheses were investigated. Forehand and Perkins (2005) suggested that dual processes occur separately and associational responses to celebrity pairings could be difficult to control. If so, then regardless of explicit brand preferences, both young adults and children could have an implicit preference for celebrity brands. For the young adult sample, this was in contrast to the prediction based on literature such as Rozendaal, Buijs et al. (2016) which suggested that dual processes interact. Due to assumed lack of advertising knowledge, it was considered

unlikely that this interaction would occur in young children, and they would still show an implicit preference for brands presented with celebrities although, again, the claim by Rozendaal, Buijzen et al. (2011) that even eight-year-olds understand celebrity advertising meant this was an open question.

Research suggests that conceptual advertising literacy may not be helpful in guarding against the celebrity effect (Rozendaal, Opree, et al., 2016), but attitudinal literacy might. A negative disposition towards ads might be useful. Hudders et al. (2017) claimed that not only do children have a limited dispositional advertising literacy (e.g. knowledge of advertising and its intent) but they also have difficulty applying such knowledge (situational advertising literacy). With this in mind, scepticism was also studied. As discussed in section 1.2, previous research suggests that a dual-process model may be needed to explain explicit and implicit advertising judgments, so an additional aim of this thesis was to begin to develop a new model of advertising response which incorporates the effects of ad scepticism in a novel way.

11.2 Summary of findings

A table summarising the main hypotheses and findings for each study can be seen in Appendix 11.1 (page 309).

The results from the younger children in Study 1 were in line with the hypotheses that they would not be able to defend themselves against the celebrity effect, and children showed both an explicit and implicit preference for novel brands paired with celebrities that they liked, as opposed to novel brands paired with neutrally rated non-celebrities. Whilst these findings supported the cognitive defence viewpoint, the view of Rozendaal, Buijs et al. (2016) was not supported and any negative feelings of manipulation (if this occurred) did not transfer to explicit judgements. However, the sample of young adults in both Studies 1 and 2 also showed an explicit and implicit preference to novel brands paired with liked celebrities. This was unexpected as it had been assumed that recognising the celebrity would allow young adults to recognise the manipulation attempt and guard against the celebrity brands in their explicit judgments. Whilst both the explicit and implicit responses were in line, there is no real evidence for an interaction between the two. On the other hand, there was also no evidence of resistance, which is against initial predictions. This led to the suggestion that the presented ad situation was not giving rise to feelings of manipulation. To explore this finding further, Study 3 tested young adults only, using real brands in place of novel brands, and the same findings emerged - young adults demonstrated both explicit and implicit preference for real brands paired with liked celebrities as opposed to neutrally rated non-celebrities.

Study 3 also saw the introduction of a measure of advertising literacy, in an attempt to explore why young adults consistently preferred celebrity paired brands. There was some evidence to suggest that attitudinal advertising literacy was related to explicit and implicit brand judgments. In Studies 1 to 3 there was little evidence to suggest that young adults consciously resisted the effects of celebrity pairing in their explicit judgments. However, whilst general attitude to advertising was more negative than might have been expected from

a sample of adults, there was evidence in Study 3 to indicate that a high level of attitudinal advertising literacy and scepticism acts upon the explicit effects of celebrity on brand judgments, but that attitudinal advertising literacy also moderates implicit effects. Additional analysis showed that those scoring higher on the accuracy-based scepticism scale had a lower explicit preference for celebrity brands, although accuracy-based scepticism was not related to implicit preference. In contrast, higher levels of affect-based scepticism was related to lower implicit preference for brands paired with celebrities. Explicit celebrity brand preference and implicit celebrity brand preference were also significant positive predictors of brand choice. It was suggested that using well-liked celebrities might have led to any scepticism being overridden by liking to the celebrity, even in young adults' explicit brand judgments.

Study 4, therefore, introduced a more realistic advertising situation, in an attempt to increase the feeling of manipulation in young adults, and also introduced a more typical situation where a range of celebrities was presented. Therefore, celebrities that were likely to be known but not necessarily well liked were used. The implicit measure was removed, and, in this study, brands were presented with a celebrity or alone rather than with a non-celebrity. A measure of accuracy-based scepticism, though different to the one used in Study 3, was also retained. Whilst higher scepticism was again correlated with lower explicit brand preference (as in Study 3), the consistent celebrity effect disappeared, and in Study 4 young adults held an explicit preference for brands presented alone, rather than with a celebrity. Young adults who scored higher on the scepticism scale before and after brand presentation had lower explicit preferences for brands presented with celebrities. However, there was no significant correlation between scepticism scores and brand preference scores when brands were presented alone. This suggested that, for young adults with high scepticism, the presence of the celebrity could have triggered resistance in their brand judgments. Explicit celebrity brand preference was a positive predictor of brand choice, whereas explicit brand alone preference was a negative predictor of celebrity brand choice.

With resistance being demonstrated by the young adults in Study 4, Study 5 used the same advertising format and explored whether the same findings emerged in children aged eight- to 14-years of age. In line with the results of the young adults, all children in this study had an explicit preference for brands presented alone, with even the eight-year-olds showing resistance to celebrity advertising - a result which would be expected according to Rozendaal, Buijzen et al. (2011). In the overall sample of children, a negative correlation emerged between preference for explicit celebrity brands and scepticism, yet there was no significant correlation between scepticism and explicit brand alone preference. It seemed that the pairing of celebrity and brand could have triggered resistance in those with high scepticism. However, the eight-year-olds demonstrated lower accuracy-based scepticism than the other age groups, raising questions about whether scepticism was the reason for their resistance.

Explicit brand preference was lower in the two older age groups (12- to 14-years) compared to the younger age groups (eight- to 10-years) suggesting that older children may be generally less susceptible to advertising. Also, for the sample of older children, a positive relationship between explicit brand alone preference and explicit celebrity brand preference

was found - a relationship which did not emerge in the younger age groups. This suggests that the older children seem to be responding in terms of a general approach to advertising, which indicates that it could be around the age of 12-years when advertising is better understood by children, and that older children tend to have a more stable attitude to brands. This shift is better indicated by the lower brand preference for 12-year-olds (and 14-year-olds) than 10-year-olds (and eight-year-olds), which fits with previous literature suggesting that by the age of 12-years of age children understand the intentions of advertising on an adult level have a more adult-like approach to ads. Furthermore, for the older children, a negative relationship between explicit celebrity brand preference and both scepticism before and scepticism after testing also emerged. These correlational findings were not found in the younger children, supporting the idea that maybe eight- to 10-year-olds do possess some degree of scepticism but may be unable to use it.

Study 6 brought together the findings of the previous studies to examine the effects of both well-liked and known celebrities on explicit and implicit brand preferences. Accuracybased and affect-based scepticism scales were used, and the more realistic advertising stimuli was retained. In this study, age differences were found across both celebrity conditions (wellliked and known). In the well-liked celebrity group, only the 14-year-old children showed resistance to the celebrity effect, having an explicit preference for brands presented alone. In contrast, no resistance was shown by the 14-year-olds in the known celebrity group where there was a significant explicit preference for celebrity brands over brand alone. Eight-yearolds, 10-year-olds and 12-year-olds showed no significant difference in explicit preference for brands presented alone or celebrity brands in either the well-liked or known celebrity group. Across the sample, in some age groups, children held different explicit and implicit brand preferences. For example, eight- to 10-year-olds in the known celebrity group had no explicit preference (for celebrity brands or brands alone) but they had an implicit preference for celebrity brands. These differences between explicit and implicit responses would provide support for Forehand and Perkins' (2005) assumption that dual processes occur separately and that implicit effects are difficult to overcome. On the other hand, the results of the 14year-olds showed that this age group have resistance to both types of celebrity (well-liked and known) in their implicit preferences, yet an explicit preference for celebrity brands paired with a known celebrity. Resistance in implicit, but not explicit, preferences would support the notion of a dual process model, but not necessarily the one proposed by Forehand and Perkins (2005). The idea that both implicit and explicit processes are involved in the processing of advertising has been supported but does not support Forehand and Perkins' (2005) contention that resistance is more likely to be seen in explicit rather than implicit responses.

Correlational results from the well-liked celebrity condition showed that, for the older children, higher scepticism (both accuracy-based and affect-based) was related to lower explicit preferences for brands presented with well-liked celebrities only, highlighting that the negative influence of scepticism on brand judgments was only seen when a celebrity was present. For the younger children, the opposite was true, and those with higher scepticism (both accuracy-based and affect-based) had lower explicit preference for brands presented alone. The pattern of correlations from Study 6 show that it is only in the older children for

the well-liked celebrity condition that there is some coherence between their accuracy-based and affect-based scepticism, brand preferences and brand choice. This suggests that, for this age group, cognitive links are being made between these factors, which ultimately influence judgments. These correlations do not appear for the younger children, which supports developmental literature that they may not be making cognitive connections between their different responses in the same, sophisticated way as their older counterparts.

In the known celebrity group, affect-based scepticism was related to lower explicit brand alone preference, but only in the sample of younger children. Consistent with the results from the well-liked celebrity condition, the older children in the known celebrity group showed no relationship between scepticism and explicit brand alone preference, again showing that, for the older children, the negative influence of scepticism is only seen when a celebrity is present. The lack of correlation between scepticism (accuracy-based and affect-based) and lower explicit preferences for brands presented with known celebrities add support to the fact that the celebrity may need to be well-liked (rather than known) for scepticism to be triggered and impact upon brand judgments.

11.3 Considering the developmental literature

One of the aims of this thesis was to assess whether, and at what age, children and young adults demonstrate resistance to the effects of pairing celebrities with brands. Research in the area of children's cognitive development (which is discussed in detail in section 1.2) tends to agree that as children get older their reasoning abilities develop and becomes more sophisticated. Friedstad and Wright's (1994) PKM model suggests that compared with older children, younger children find it difficult to appreciate the information contained in advertising and to recognise that advertisers present information from the perspective of their own biased interests. Throughout this thesis, six studies have explored both explicit and implicit responses to celebrity brands and brand choices. Furthermore, an examination of whether scepticism is linked to resistance to the celebrity effect was included. Each of these three main features will be discussed in relation to the original aims of the research.

11.3.1 Explicit preferences and brand choice

This thesis, by using both novel and real brands with young adults, has highlighted that pairing a well-liked celebrity with brands can have a positive effect in favour of the brand even if it is unknown or has not been advertised previously. This is an encouraging finding for advertisers. The brands in Studies 1 and 2 had not previously been seen by young adults, yet they were preferred when they were paired with a well-liked celebrity, which was also replicated in Study 3 with real brands. Furthermore, brand evaluations became more positive after pairing with a liked celebrity. For similarly rated brands, those paired with celebrities were preferred to those paired with non-celebrities, and even for novel brands that had previously been rated neutrally, an overwhelming number of young adults chose celebrity-paired brands as their favourite brand choice.

For the young adults, the general body of literature was consistent - adults should be able to guard against the effects of celebrity as they should realise that the celebrity images had no bearing on their evaluation of the brand. According to Rozendaal, Buijs et al. (2016), young adults should be able to recognise a manipulation attempt which should trigger negative feelings which impacts on their attitudes. This should then be picked up in young adults' explicit brand preference. However, this was not the case, and young adults seemed unable to resist the celebrity effect, demonstrating an explicit preference for brands paired with well-liked celebrities. One explanation as to why young adults' responses did not offer support for the hypothesis could be explained through celebrity eclipsing. One of the main findings of Ilicic and Webster's (2014) research was that high eclipsing (where the celebrity, rather than the brand, is the focal point of the ad) in consumers with strong celebrity attachment, enhances brand attitude, regardless of whether they perceive the celebrity and brand to either match or mismatch. In contrast to the findings of Forehand and Perkins (2005), therefore, these findings suggest that where there is a strong preference for a celebrity (as in Studies 1 to 3), this can lead individuals to be more positive in their reasoning about the associated brand, even when they are aware of the persuasive intent of using celebrities in the ads. This could also be an explanation for the children's responses, which led to the study of known celebrities in later studies of the thesis.

As explored in the discussion of Study 1 (section 3.6), further suggestions were offered as to why the young adults may have failed to resist the celebrity effect. Firstly, simple pairing of stimuli (brands and head and shoulder photos) was used to help participants to recognise that the celebrity was not really relevant to evaluating the brand logo. It was also used to examine where the boundary between associative processing and propositional processing lies. However, the absence of a clear endorsement by the celebrity may have meant that the simple pairing procedure had a positive influence upon evaluative judgments of the brand, because where fake brands are being seen for the first time, there is no other meaningful cue upon which to base this judgment. Heath (2012) suggested that in order for cognitive defences against advertising to be engaged, adults need to be able to recognise that they are being subjected to an attempt to persuade them. Failing to recognise an advertising attempt is likely to show a lack of resistance, as young adults possibly failed to feel like they were being manipulated. This was addressed in Study 2 where persuasive taglines were included.

Laran et al. (2010) described how consumer behaviour is often swayed by marketing tactics such as slogans, with research suggesting that consumers can more easily recognize how slogans are meant to influence their behaviour. It was therefore expected that including taglines in Study 2 would increase the possibility that young adults would consciously attempt to resist any unwanted bias encountered when presented with advertisements (Williams et al., 2004). However, even when an advertising tagline was included, young adults demonstrated an explicit preference for brands paired with a celebrity. Friedstad and Wright (1994) suggested that when consumers understand how a stimulus such as taglines is intended to influence their behaviour, they are more likely to perceive it as a persuasion tactic. However, there was no evidence of this demonstrated in the findings of Study 2, which could be because that despite the introduction of the slogans, participants still did not feel that

they were being subjected to a persuasion attempt. Perhaps the novel brands created for these studies, combined with the experimental situation, gave rise to an experience that was not sufficiently lifelike to encourage participants to feel that they were being manipulated and therefore demonstrate resistance. In order to address this issue, in Study 3 novel brands were replaced with real brand logos, yet young adults still held an explicit preference for celebrity paired brands.

Literature which has looked at the celebrity "match" to the brand has tended to suggest that strong celebrity attachment enhances brand attitude, regardless of whether they perceive the celebrity and brand to match or mismatch (Ilicic & Webster, 2014). Although Mishra (2015) found that the believability of an ad was significantly higher when presented with a congruent celebrity, the findings from Studies 1 to 3 suggest that this congruence is not necessary for brand liking to occur when people have a strong liking for the celebrity. In Studies 1 and 2 the brands were novel brands, unknown to the young adults, and therefore there was no opportunity for reflection upon whether the celebrity was congruent with the brand being presented. Furthermore, the brands were presented as a logo format, and therefore young adults would have very little information as to what the brand represented for example, sportswear, food, fashion. However, brands paired with well-liked celebrities were liked as opposed to neutrally rated, as they could have been. Studies 1 and 2 could have shown no difference across celebrity brand or non-celebrity brand ratings, however these studies showed a significant preference for brands paired with well-liked celebrities. This shows that young adults did not seem to mind that they had no knowledge of the brands that were paired with the celebrities they liked, and highlights that the well-liked celebrity played a big part in explicit brand judgements.

According to Kang and Herr (2006), factors associated with a celebrity are more likely to lead to positive brand evaluations where consumers' motivation to process information is low. Because it is likely that in Studies 1 and 2 there was little (or no) recognition of manipulation, motivation to process the information may have been high. It is plausible that when presented with unknown brands with celebrities that young adults, who are cognitively developed, will be motivated to try and make sense of the situation. Kang and Herr suggested that where motivation to process information is high, and consumers cannot see a relevant link between celebrity and brand (as may have been the case for the young adults in these studies), they may overcorrect against the perceived source of bias leading to negative brand evaluations. This would offer an alternative explanation as to why young adults had an explicit preference for celebrity paired brands - it could be that negative feelings towards the unknown brand were shown, and the liking for the celebrity overrode their preferences leading to a celebrity brand preference. This would also fit with the correlational results which showed celebrity liking and explicit celebrity brand preference to be directly related. Heath (2012) has also argued that when the potential for conscious cognitive elaboration of advertising material is high, consumers are much more likely to process material critically and therefore advertising may be less effective. Overall, this would fit with findings suggesting that the use of celebrities is more effective under conditions of low involvement, where consumers have little interest or motivation to engage in deep

processing of ad information, and this highlights the key role of implicit (as opposed to explicit) evaluations in influencing consumers' responses to celebrity endorsement.

Tavassoli and Lee (2003) highlighted the importance of modality in advertising, suggesting that elements such as jingles, music (auditory) and images, logos (visual) can have an unintended negative effect by interfering with our processing mechanisms. In particular they found that in English ads, auditory elements can interfere more with cognitive responding than visual elements. This could offer one explanation as to why initial results reported in this thesis saw young adults act in a way different to those in the study of Forehand and Perkins (2005). Wogalter et al. (2014) found that TV ads using both visual and auditory presentation produced the highest level of later recall and recognition. However, when separated into visual only and auditory only, the visual only ad produced better performance. This may go some way to explaining why the young adults in Studies 1 and 2 had more likelihood of the celebrity ads being remembered more so than the young adults in Forehand and Perkins' study. This could have affected the preferences and choices made.

As previously discussed, one consideration to explain the findings of the first three studies was that young adults did not feel that they were being advertised to, and therefore they felt no need to offer resistance to the celebrity effect. Consequently, Study 4 introduced a presentation method which was more representative of modern day advertising. This change in method saw young adults in Study 4 hold an explicit preference for brands presented alone rather than brands presented with a celebrity. For the first-time young adults were demonstrating resistance to the celebrity effect. The presentation of brands in Study 4 depicted a more accurate representation of how ads are typically presented in everyday life, and therefore, it is more likely to have triggered recognition of being manipulated which enabled resistance to the celebrity paired brands. Therefore, in terms of triggering resistance, the change in procedure in this study seems to have worked although the presentation remained to be visual only.

The eclipsing effect that is seen when celebrities are well-liked is lost when the celebrities are simply known (Ilicic & Webster, 2014). As consumers, we are not only exposed to adverts that contain celebrities we like, and therefore it was expected that the presence of a celebrity with the brand would trigger cognitive defences within individuals which would enable them to guard against the intended persuasive nature of the celebrity figure. The results of Study 4 are therefore in line with this prediction, and also fit with the suggestion that celebrities in ads do trigger cognitive defences in young adults, but when the celebrities are well-liked these defences are overridden. Friedstad and Wright (1994) highlight the importance of recognising the intended persuasive tactic within an advert. It may be that the 'tactic' of including a celebrity in an ad should make it easier to recognise an ad event but, even so, positive feelings for a celebrity may neutralise the recognition of manipulation and overrides defences.

The explicit preference results of Study 4 were replicated in Study 5 with children aged eight- to 14-years of age, with children in all age groups having an explicit preference for brands presented alone over brands paired with a known celebrity. As predicted by the PKM (Friedstad & Wright, 1994), Study 5 showed that brand preference decreased with age, with overall brand preference being lower in the older children. However, in Study 6, the 14-

year-olds in both groups (well-liked and known) discriminated in their brand judgments dependent upon whether or not they were presented with celebrities. For the 14-year-olds in the known celebrity group, there was a significant explicit preference for celebrity paired brands over brands presented alone. This is a response which was expected, but not seen, in the young adults in Studies 1 to 3. John (1999), extending upon Piaget's (1932) cognitive development theory, stated that even 14-year-olds do not respond like adults in terms of their advertising understanding, yet offered no explanation as to why. Whilst more research would be beneficial, to explore these differences further, the importance of triggering scepticism may be one tentative explanation as to why 14-year-olds and young adults may respond differently.

When discussing the results of the older children, it has previously been suggested that they may not resist advertising's effects, and it is only when they have an emotional response to the celebrity that scepticism is triggered. Therefore, an alternative explanation as to the difference in responses across young adults and older children could be that older children need an emotional response to the celebrity to be able to trigger resistance. However, it is unlikely that this suggestion alone truly captures why older children and young adults may be different in their thinking. Livingstone and Helsper (2006), in their work on media literacy, suggested that different processes of persuasion operate at different ages, with older children being persuaded by high quality arguments. This may provide an insight into why older children and even young adults' explicit preferences were in favour of the celebrity brand in some of the studies reported throughout this thesis. In Studies 1 to 3 it was argued that the young adults did not feel advertised to, and therefore the effects of well-liked celebrities were met with no resistance in either explicit or implicit judgments. Therefore, there was unlikely to have been any negative feelings to transfer to their brand preferences (as predicted by Rozendaal, Buijs et al., 2016), suggesting that a strong liking for celebrities in Studies 1 to 3 influenced brand judgments and overrode advertising defences. However, according to Heath (2012), it may be that to some degree the success of celebrity endorsement rests upon not encouraging consumers to engage in explicit propositional evaluation of advertisements. So, although we would expect older children and young adults to be more persuaded by a quality argument, they were still affected by the presence of a celebrity (Studies 1 to 3, well-liked; Study 5, known) unless something triggered scepticism.

The known celebrities used in Studies 5 and 6 were selected on the basis that they should be known by the participants, yet they may not have any particular liking or disliking of them. As discussed previously, the 14-year-olds' mean "liking" score for the known celebrities was low, meaning that these celebrities may have actually been disliked. Till and Shimp (1998) found that whilst positive feelings towards a celebrity transfer to the brand (even under conditions of low effort), any future negative information of the celebrity lowers brand evaluations. This may have happened here, particularly in Study 6 where children were tested over a three-week period. It is possible that children will have been exposed to these celebrities in different contexts during the testing period, and, consequently, brand evaluations could have been influenced and altered. Future studies may benefit from exploring the effect of repeated exposure of celebrities on preferences.

In comparison to the known celebrity group in Study 6 (and the young adults in Studies 1 to 3), the 14-year-olds in the well-liked celebrity group seemed to show resistance in their immediate responses to the celebrity effect – something which was expected of the young adults in Studies 1 to 3. Whilst scepticism is addressed at length later in the discussion, it seems logical to infer here that it was only when the 14-year-olds responded to well-liked celebrity brands that scepticism was triggered – so liking did not override scepticism in this case, instead, those who had high levels of scepticism tended to be lower in celebrity brand preference. Figure 10.7 (page 165) offered a model which suggested that it is possible that being triggered to think of the advertiser's intent of using a highly liked celebrity altered the preferences of the older children in Study 6, whilst being protected of this recognition in Study 3 allowed young adults to follow their "gut feelings" in favour of the well-liked celebrity.

The finding that 14-year-olds in the well-liked celebrity group of Study 6 had a significant preference for brands alone over celebrity brands does not match the expectations of the literature concerning celebrity eclipsing. Ads are considered to be most effective when processed under conditions of low involvement (Choi et al., 2005) which suggests that where an ad contains no product information to process, we may rely on our affective attitude. Explicit preferences and brand selections may therefore alter if a general dislike for ads is held, which suggests that this sample of children may have lowered celebrity brand selections because they hold a general negative affective response towards celebrity ads quite generally. According to the cognitive defence stance, even if young children can process the intent adherent to advertising, they still have to connect up other responses to apply it in their defence. This connective process does not seem to occur in the same way in younger children, which can help to explain why younger children showed no preference for either set of brand pairings.

For the 14-year-old children, the immediate preference seen in Week 2 disappeared and, at Week 3, they showed no difference in preference in either the well-liked or known celebrity condition. It appears as though any resistance to the well-liked celebrities in Week 2 had been lost one week later in the older age group - any immediate celebrity effect disappeared. It is worthwhile considering that some of the celebrities may also be associated with their own advertising campaigns, or involved with celebrity endorsement for other companies, which could have led children to consider the "fit" of the celebrity with the brand, in comparison to the brands they usually advertise or endorse. Whilst there is some disparity concerning the importance of celebrity "fit" (e.g. Ilicic & Webster, 2014; Mishra, 2015), being aware of this during the time of testing may also have altered children's perceptions of the celebrity being used in this study. Further research into the effect of celebrity disliking on children's and young adult's brand preferences would drive this research forward. Furthermore, Büttner et al. (2014) criticised many previous studies for examining explicit and implicit preferences at time of testing, rather than at time of consumption which is more representative of typical advertising which largely occurs some time before purchasing. As Büttner et al. noted, it is likely that attitudes and preferences alter during the gap between ad exposure and intention to buy. The results from Study 6 offer

support for this claim as the 14-year-olds initial explicit preference was not shown one week later.

This thesis explored the effects of celebrity advertising as it seems to be one tactic that children understand reasonably well (Rozendaal, Buijzen et al., 2011). Due to the findings from Rozendaal, Buijzen et al.'s study (2011) where even eight-year-olds were able to identify the intentions of ads using celebrity endorsement, Hudders et al. (2016) stated that celebrity endorsement is not a tactic to which children are vulnerable. If eight-year-olds understand about celebrity endorsers, then it seemed logical to expect them not to hold a preference for celebrity paired brands, and that active resistance might be demonstrated by preferring brands presented alone. Showing no preference for celebrity brands could be construed as not being influenced by the celebrity. However, this assumption did not fit with previous work concerning children's vulnerability to ads which derived from the cognitive defence literature (see section 1.2). Study 1 demonstrated that simple pairing of well-liked celebrities with novel brand logos can influence young children's explicit preferences for brands and the brand choices they make. Based on developmental literature which suggests younger children have limited cognitive defences, it was not surprising to find that children in this study held an explicit preference for brands paired with celebrities that they like, although this finding did call into question whether young children do understand celebrity endorsement as a tactic.

The advertising format presented in Study 4 saw young adults defend against the celebrity effect in their explicit preferences - this was the first time throughout the studies in this thesis that this result was found. Therefore, Study 5 adopted the same method to explore whether the same findings emerged in a sample of children aged eight- to 14-years-old. Children in all age groups had an explicit preference for brands presented alone rather than brands presented with a celebrity, which appears to show evidence of resistance in all age groups, offering support for the claims of Rozendaal, Buijzen et al. (2011) that children as young as eight-years of age have a good understanding of celebrity advertising. When considering the work of Friedstad and Wright (1994) and the Persuasion Knowledge Model, it would be reasonable to expect eight-year-olds to rate brands presented alone and celebrity paired brands equally, or to prefer celebrity brands more. As discussed in section 1.2, the cognitive defence view suggests that the cognitive abilities of eight-year-olds may be limited, which could impede their ability to understand the intentions of advertisers and therefore mean that their capacity to resist ads is restricted. However, the results presented here suggest resistance did occur in the younger age groups as there was no explicit preference for celebrity brands, as we may have expected. On the other hand, the results did offer support for the developmental literature as brand preference decreased as children got older, highlighting that 14-year-olds preferred brands less than younger children. This may be evidence of a more coherent general response to advertising that is increasingly less positive with age.

One of the two conditions in Study 6 also used known celebrities. In contrast to the results of Study 5, this condition of Study 6 found that children aged eight-, 10- and 12-years showed no significant difference in explicit preference for brands presented alone or with

known celebrity brands. Based on the PKM (Friedstad and Wright, 1994), this is a response that could have been expected, and provides some evidence for the fact that younger children may not be resisting celebrity brands and perhaps don't understand the intent behind celebrity advertising, as Rozendaal, Buijzen et al. (2011) predict. The cognitive defence view (see section 1.2) suggests that the cognitive abilities of eight-year-olds may be limited, which could impede their capacity to resist ads. Following the findings of Study 5, in relation to the eclipsing literature, the young children of Study 6 have offered some support for the assumption that the celebrity eclipsing effect is lost when celebrities are known rather than well-liked. Whilst there was no significant difference between explicit preferences for brands presented alone or brands presented with a celebrity, if the celebrity was seen to be the focal point of the ad, we may have expected celebrity brands to be favoured.

As discussed in section 1.2.2, McAlister and Cornwell (2009) tested preschool children's Theory of Mind to explore whether it was related to understanding of persuasion knowledge of print advertisements. Research has criticised the work of McAlister and Cornwell for not measuring persuasive intent (Lapierre, 2013), although the researchers did conclude that those children with better developed Theory of Mind were more likely to understand brand campaigns and brand awareness. Methodologically, the research of McAlister and Cornwell is similar to that presented in Studies 4 to 6, by using print ads rather than televised content, and it can infer similar findings. Whilst neither persuasive intent nor Theory of Mind were directly tested throughout the research presented here, the studies reported in this thesis have included measures of scepticism (which will be explored later in the discussion) and liking towards ads containing celebrities, which could be indicative of understanding the nature of advertising. The findings in this thesis, by incorporating measures of scepticism, offer some support for the conclusions of McAlister and Cornwell (2009). It has been suggested throughout the thesis that young children may have awareness of celebrity advertising, yet they haven't fully developed the cognitive skills necessary to apply a defence.

Livingstone and Helsper (2006) argued that the evidence on children's responses to advertising does not support the widely held belief that younger children are more influenced by advertising (even though older children may be more "media literate"), but rather different processes of persuasion operate at different ages. For example, Livingstone and Helsper claimed that younger children would be more inclined to be persuaded by advertising containing celebrities, whereas older children are more likely to be persuaded more by ads that contain high quality arguments. The findings of Studies 5 and 6 appear to disagree with this view. Whilst scepticism was shown to increase with age, and therefore is supportive of the general development literature on cognitive development (e.g. Piaget, Theory of Mind), in Study 5, younger children matched the explicit preferences of the older children and showed an explicit preference for brands presented alone. In Study 6, the younger children did not show a preference for celebrity brands in their explicit judgments when, in accordance with the developmental literature and the findings of Livingstone and Helsper, we may have expected them to be more persuaded and succumbing to the celebrity effect by showing a preference for the celebrity paired brands. In sum, the younger children in Studies 5 and 6 were less influenced by the presence of the celebrity than Livingstone and Helsper's

argument about superficial cues would predict, and also less than the traditional account would propose.

In terms of final brand choice, explicit celebrity brand preference was consistently a positive predictor of final brand choice. This is a finding which emerged from the samples of young adults in Studies 3 and 4, and the samples of children in Studies 5 and 6 (in both the well-liked and known celebrity group). In Studies 4, 5 and 6, brand alone preference was a negative predictor of final brand choice, yet in Study 3 where brands were paired with noncelebrities than alone, this relationship did not emerge - non-celebrity brand preference did not predict celebrity brand choice. This finding highlights the importance of the celebrity. In terms of Gawronski and Bodenhausen's APE model (2011), it could be suggested that at an associational level, recognition of a celebrity could also produce an affective response which non-celebrities do not generate. Again, the effects of scepticism and preferences will be explored further later in the discussion but are worthwhile mentioning here in relation to explicit preferences and brand choice.

11.3.2 Implicit preferences and brand choice

In Studies 1 to 3 young adults consistently demonstrated an implicit preference for celebrity brands. These results matched the predictions of Forehand and Perkins (2005) who suggested that because affective associational responses to the celebrity pairing could be more difficult to control, young adults would have an implicit preference for brands paired with well-liked celebrities. Furthermore, the reanalysis of Study 3 highlighted that implicit celebrity brand preference was a significant positive predictor of brand choice. Although these implicit results were consistent with young adults across all three studies, the results need to be treated with caution. It has been widely discussed throughout this thesis that a lack of resistance against celebrity brands in the earlier studies could have been due to young adults not feeling like they were being advertised to. Consequently, we must consider that, had negative feelings of manipulation been present, negative emotions stemming from recognition of manipulation might have led to resistance (Rozendaal, Buijs et al., 2016). Rozendaal, Buijs et al. (2016) suggested that recognizing a persuasion attempt triggers negative affective response which impacts on attitude and scepticism, triggering explicit resistance. This would mean that for young adults we could have seen evidence of resistance in both their explicit and implicit responses. Adults' implicit responses were not tested in later studies, where the focus turned to children, and therefore the focus of this section lies in examining the implicit preferences of older and younger children.

Following the cognitive defence theory, it was expected that if children also recognise a manipulation attempt, then they might also hold negative feelings which might transfer to their brand judgments. It was suggested that this would likely only occur in older children (over the age of 12-years) whose cognitive abilities are presumed to be at ceiling. The results of the young children in Study 1 supported this view, and children held an implicit preference for brands paired with a well-liked celebrity. With children's propositional processing abilities being considered to be limited due to their underdeveloped cognitive abilities, this

finding falls in line with the prediction that if they did not recognise the manipulation attempt of the celebrity, then no implicit resistance would be shown in their preferences.

Implicit responses were also measured in children aged eight- to 14-years in Study 6. Analysis showed that younger children had a significant implicit preference for celebrity brands. Matching the implicit results of the young children in Study 1, these results are in contrast to the prediction that because eight-year-olds understand about celebrity advertising they may also recognise a manipulation attempt, consequently holding negative feelings which might transfer to their brand judgments (Rozendaal, Buijzen, et al., 2011). As with Study 1, the younger children's implicit preferences were in favour of celebrity brands. In contrast, older children had a significant implicit preference for brands presented alone, which was the only time in the studies reported throughout this thesis where resistance to the celebrity effect was shown in implicit preferences.

Whilst implicit responses will be discussed in more depth in section 11.3.4 where dual processing models are examined, it is important to note here that for the older children in the known celebrity group, this implicit preference for brands alone was in contrast to their explicit preferences, where celebrity paired brands were preferred. Rozendaal, Buijs et al. (2016), suggest that recognizing a persuasion attempt triggers negative affective response which impacts on attitude and scepticism, triggering explicit resistance, which, for the older children, is not supported. However, in relation to the well-liked celebrity subgroup, explicit brand preference and implicit preference results aligned in the older children and showed that, overall, children with lower explicit celebrity preference were more likely to have lower implicit preference for well-liked celebrity paired brands also. As predicted by Rozendaal, Buijs et al. (2016), this finding supports the notion that dual processes interact and that associational implicit preferences could be triggered if recognition of manipulation and persuasion occurs. This will be explored further in section 11.3.4 which discusses the operation of dual processes.

11.3.3 Advertising scepticism, preference and brand choice

Examining the importance of scepticism on children's and young adults explicit and implicit preferences was an important aim of this research. A lot of research has seen advertising literacy as being the key which enables children to protect themselves against advertising. Three aspects of advertising literacy had been proposed previously but attempts to measure it have been criticised (see Kunkel, 2001) and have focused entirely on explicit knowledge and skills. An earlier attempt to measure it in this thesis (see Study 3) based on the work of Rozendaal, Opree et al. (2016) also failed. Therefore, the later three studies reported in this thesis (Studies 4 to 6) introduced scales to measure advertising scepticism more specifically.

It has already been discussed that the young adults in earlier studies were unlikely to have felt manipulated, which offers an explanation as to why they preferred celebrity brands both explicitly and implicitly. Despite this, results of Study 3 showed an effect of general scepticism on both their explicit and implicit responses. Further analysis of Study 3 divided the scales into accuracy-based and affect-based scepticism, and results highlighted that those

with higher accuracy-based scepticism showed lower explicit preference. There was no significant correlation between affect-based scepticism and explicit brand alone preferences, indicating that, at least in adults, it is their accuracy-based scepticism which counteracts the celebrity effect in their explicit responses. This was also highlighted in the analysis of "high" vs "low" liking of celebrities. Whilst high celebrity liking was positively correlated with explicit celebrity brand preference (matching the older children of Study 6), for young adults' explicit preference was for well-liked celebrity brands. It was suggested that, for the older children where affect-based scepticism was also correlated with explicit celebrity preference, this aided resistance in the older children. This highlights the importance of affect-based scepticism when responding to celebrities for whom a high liking is shown. In Study 3 those with higher affect-based scepticism showed lower implicit preference. These results provide a compelling argument that in the absence of negative gut feelings about a manipulation attempt, an effect of pre-existing general scepticism (accuracy-based and affect-based) is seen.

The results of Study 3 have shown that pre-existing general scepticism can affect responses to brands. Whilst Rozendaal, Buijs et al. (2016) proposed that the celebrity effect in advertising results mainly from the triggering of implicit, associative evaluations, this did not seem to happen in the sample of young adults in Study 3, as no relationship between affect-based scepticism and explicit responses was found. The processes uncovered in Study 6 were different, and they were also varied in the different age groups, as a connection between affect-based scepticism and lower explicit responses in the older children was found in the well-liked group of Study 6 that was not present in adults or younger children. Only older children in the well-liked group of Study 6 showed a negative relationship between scepticism and explicit celebrity brand preference which suggests that, for older children, scepticism is only effective when a liked celebrity is present. This could indicate that, because of high exposure to advertising situations, older children do not feel the need to raise defences each time an ad is seen, yet when a well-liked celebrity is present they become alerted to an attempt of manipulation. It could be that the presence of a well-liked celebrity encourages individuals to consider the ad situation, which enables them to think critically about the intent of using a celebrity as a manipulation attempt.

According to Heath's (2012) view, advertising works best under conditions of low involvement, yet the results of the older children in Study 6 offer support for the notion that recognising the manipulation attempt and considering the intention acts as a defence. As Rozendaal, Buijs et al. (2016) proposed, the recognition of manipulation triggers negative feelings which impact on attitudes and scepticism, which are picked up on in explicit preferences. The relationship between high celebrity liking and explicit celebrity brand preference was positive for the young adults in Study 3, which may offer an explanation as to why young adults in this study preferred brands paired with celebrities. This result could pose an argument that celebrity liking could be directly related to brand preferences, regardless of whether a manipulation attempt was recognised. However, unlike the sample of older children in Study 6, there was no relationship between high celebrity liking and scepticism for the young adults, which offers support for the notion that they did not feel like they were being advertised to in earlier studies, and therefore scepticism was not triggered.

As explored in the discussion of Study 6 (see section 9.4), the scepticism scale used in Study 3 was only retrospectively separated into accuracy-based items and affect-based scepticism and the affect-based scepticism questions did not form a standalone scale. Therefore, the affect-based scepticism questions would not have been as identifiable to the young adults as they were to the children and, as such, would likely to have been consciously processed or reflected on less - young adults would have likely engaged in "gut feeling" associational processing. In Study 6, children were asked to complete two separate, distinct scepticism scales, and it was found that when the well-liked celebrity was highly liked this was associated with a decrease in affect-based scepticism, which in turn was related to a higher preference for celebrity brands. Whilst 14-year-olds in the well-liked group in this sample had an explicit preference for brands presented alone and therefore deviated from the predictions of the model, it could be proposed that being asked to reflect on their affect-based scepticism made these children more aware of the persuasive intent of the celebrity in the advertisement, which actually brought their affect-based scepticism in line with their conceptual understanding. This possibly triggered an explicit defence against the celebrity brand.

As suggested in the reanalysis of Study 3 (see section 8.1), it could be that the liking of a specific celebrity could produce a strong positive affective response based upon associational processes, which leads to a positive "gut feeling" which overrides scepticism or conceptual awareness of the nature of celebrity advertising, but this may only have occurred in the studies involving young adults where the adults did not feel particularly manipulated and reflection upon affect-based scepticism did not occur. In sum, it could be that being made consciously aware of one's own affect-based scepticism (as in Study 6) could have enabled recognition of the persuasive intent of the celebrity and encouraged the 14-year-olds with a high level of affect-based scepticism to put up resistance in their explicit judgments. This may not have been possible in the young adults of Study 3, which could explain why an explicit preference for brands presented with a well-liked celebrity was shown. One explanation to clarify the differences in findings across older children and young adults may be that being presented with a well-liked celebrity, and having to consciously think about scepticism, could work together. However, future research (as discussed in section 11.6) to validate this assumption is needed.

In Study 5, despite preferring brands presented alone in their explicit preferences, younger children's judgments appeared to involve different underlying processes to those of older children. Whilst older children held a relationship between accuracy-based scepticism and explicit celebrity brand preference, for younger children this pattern did not emerge. The correlational findings from the overall sample of children in the known celebrity condition of Study 6 were minimal, as were correlational results of older and younger children. However, the absence of significant relationships between scepticism and other responses could tell us a lot about children's thinking. In line with the results of Study 4 (young adults) and Study 5 (children), there were no relationships in Study 6 between scepticism and explicit brand alone preference in the overall sample. This provides support for the fact that the effects of scepticism are only seen for children when a celebrity is present. This could offer support for the work of Heath (2012) who suggests that advertising works best under conditions where conscious cognitive elaboration of advertising is low, and could explain why 14-year-olds

had an explicit preference for brands presented with a known celebrity. When faced with an ad event involving known celebrities for adults and older children, a high level of accuracy-based scepticism could be the driver of the ability to defend against the explicit effects of celebrity-based advertising, yet for younger children whose conceptual advertising knowledge may be more limited, high levels of affect-based scepticism may be necessary. As predicted by Rozendaal, Buijzen et al. (2011), it could be that eight-year-olds are able to recognise persuasive intent, but it may be that they don't know what to do with the knowledge, and therefore, although they act like older children and also prefer brands presented alone, they may have very different reasons for holding this preference.

When looking at the well-liked subgroup of Study 6, higher affect-based scepticism was related with lower explicit celebrity brand preference in the older children, yet for the younger children, it was related to lower explicit preference for brands presented alone. For the younger children, their level of general ad scepticism was only related to how they responded to brands when the brand had not been paired with a celebrity. It could be that for the younger children the presence of a celebrity dampened the effect of general ad scepticism, possibly due to celebrity eclipsing (Ilicic & Webster, 2014), and where the presence of a celebrity became the focal point of the advert, strong celebrity attachment limited scepticism to be activated. This is in contrast to the older children where the presence of a celebrity may have heightened general ad scepticism.

The current research explored the effects of celebrity advertising as it seemed to be one tactic that children understand reasonably well (Rozendaal, Buijzen et al., 2011). However, for the young children low celebrity liking was not related to higher scepticism (accuracy-based nor affect-based), suggesting that contrary to the findings of Rozendaal, Buijzen et al. (2011) and Hudders et al. (2016), younger children may not fully understand the use and intent of using celebrities in ads. This fits with the idea that, even if children of this age are sceptical about ads, this seems to operate independently of their other judgments (i.e. not related to preference responses). In this instance, they may have a high liking for the celebrities, which is connected to their explicit brand preference judgments, but it could be that they are not applying scepticism. This fits with previous assumptions about children's vulnerability to ads derived from the work of Piaget (see section 1.2.1). Based on this earlier work, it would be questionable whether ad literacy in young children is sufficiently developed to trigger scepticism. However, the results presented in Studies 5 and 6, suggest that young children's general advertising scepticism is just as well developed as older children's but they may not apply it in the same way, or as effectively.

The results of the well-liked condition of Study 6 suggest that scepticism does seem to offer a defence against brands, at least in brand preferences, but it seems to operate in a different way in the younger and older groups. Despite this, when looking at the regression analyses, neither accuracy-based nor affect-based scepticism were negative predictors of brand choice - a finding which was consistent across the whole sample. Whilst scepticism did not predict final brand choice, for the older children the correlational results did show a negative relationship between affect-based scepticism and final brand choice, suggesting that where affect-based scepticism was higher, celebrity brands were chosen less frequently. Where an ad contains no product information to process, we may rely more on our affective

attitude, and explicit preferences and brand selections may alter if a general dislike for ads is held. This is more likely where an ad contains no product information to process and reliance on affective attitudes are more prominent. Older children may have lowered celebrity brand selections because they hold a general negative affective response towards celebrity ads, which fits with the finding that 14-year-olds had higher levels of affect-based scepticism than the other age groups. This suggests that their general dislike for ads was related to their brand selections, which could indicate that a high level of affect-based scepticism is also necessary for resistance to the celebrity effect to be effective.

Hudders et al. (2017) suggested that whilst young children do have limited knowledge of advertising and the intent surrounding it (which they called 'dispositional literacy'), they have difficulty applying such knowledge ('situational advertising literacy'). Support for this finding has been given when looking at the correlational analysis of highly liked celebrities and scepticism in Study 6, which showed that, unlike the results of the older children, very high celebrity liking was not related to low scepticism in younger children. This contradicts the findings of Rozendaal, Buijzen et al. (2011) which suggest that younger children understand the use and intent of using celebrities in ads. This fits with the idea that even if children of this age are sceptical about ads this seems to operate independently of their other judgments (i.e. not related to preference responses) and that they are not applying scepticism. As previously discussed, it could be that for the younger children the presence of a well-liked celebrity dampened the effect of general ad scepticism due to celebrity eclipsing. There were no significant correlations to report from the younger children with lower celebrity liking which suggests that, for celebrity eclipsing to be effective, the celebrity needs to be wellliked, although this may only be the case for younger children who have lower cognitive processing of ads in general and may rely on superficial cues (for example celebrity endorsement) as the basis for their preferences.

11.3.4 A dual process account of advertising

As the findings from this thesis emerged, so too did the need for new dual-processing models of celebrity advertising to be created. The main model of advertising that has been drawn upon extensively throughout this thesis has been the Persuasion Knowledge Model, dated 1994 (Friedstad & Wright). Over the last 25 years the advertising market has grown substantially, and advertising methods now vary greatly. Therefore, peoples' defences may have evolved and it could be that not all advertising is attended to. This is a factor that the PKM model may not be able to accommodate. Whilst the PKM is useful in explaining research findings in relation to some of the older, more typical advertising formats, it is questionable whether the model is fit for purpose when considering more recent advertising formats or adverts where celebrities are present. As discussed throughout this thesis, a more recent model of advertising was needed, and, as such, various dual-processing models of celebrity advertising were created as new findings emerged. However, it is likely that future models would need to be adapted to focus on differing advertising techniques.

Evidence of explicit and implicit preferences operating independently was found in the reanalysis of the young adults in Study 3. Throughout Studies 1 to 3, irrespective of explicit preferences to celebrity brands, the results of the young adults (Studies 1 to 3) remained consistent and an implicit preference for celebrity presented brands was shown. From the research carried out by Forehand and Perkins (2005) it was expected that young adults would find it difficult to protect themselves from the effects of celebrity influence in their implicit responses, and the results were in line with this assumption. In contrast, Rozendaal, Bujis, et al. (2016) suggested that recognizing a persuasion attempt triggers negative affective response which impacts on attitude and scepticism, triggering explicit resistance. This meant that for young adults we could have seen evidence of resistance in both their explicit and implicit responses. But this was not shown throughout Studies 1 to 3 and instead it was found that explicit and implicit processes aligned positively.

Of course, there has been lengthy discussion concerning whether the stimuli represented a true to life advertising situation and whether this enabled any initial manipulation to occur. Consequently, we must consider that, had negative feelings of manipulation been present, negative emotions stemming from recognition of manipulation might have led to resistance (Rozendaal, Buijs et al., 2016). Rozendaal, Buijs et al. (2016) suggested that recognizing a persuasion attempt triggers negative affective response which impacts on attitude and scepticism, triggering explicit resistance. This would mean that for young adults we could have seen evidence of resistance in both their explicit and implicit responses. It could also be possible that adults don't attend to, or even explicitly recognise advertisements as much as initially thought, since technological advances and the ubiquity of advertising mean that we are increasingly surrounded by advertising in a wide variety of guises. If we are constantly surrounded by advertising, with some of it being unattended, is it plausible that we can always be on guard against any unwanted effects? Heath (2012) suggested that when consumers are able to critically evaluate advertisements, their ability to consciously reflect can actually alert them to recognise manipulation, thus affecting their explicit brand preferences. Furthermore, he proposed that "switching off" to advertising could actually be a key route to persuasion as cognitive defences are lowered and the implicit effects of advertising are difficult, or even impossible, to overcome.

When looking at the reanalysis results of Study 3, where scepticism (accuracy-based and affect-based) was correlated with explicit preferences, implicit preferences and brand choice, evidence of dual-processing emerged, and a new model of celebrity advertising was proposed (see Figure 8.1, page 101). Correlational results demonstrated that, for adults, it was accuracy-based scepticism which was related to explicit brand preferences rather than affect-based scepticism. As discussed throughout, Study 4 utilised a more realistic advertising situation and moved from using well-liked celebrities to celebrities simply known to young adults, and therefore direct comparisons of young adults in Study 3 and Study 4 should be treated with caution. However, it is important to highlight that a high level of accuracy-based scepticism was negatively related to explicit celebrity brand preference in this study also. This is therefore a finding which emerged when young adults were presented with both well-liked and known celebrities and is shown in both models (see Figure 8.1, page 101 and Figure 8.2, page 104) of celebrity advertising (both well-liked and known). Furthermore,

regression analyses showed that celebrity brand preference positively predicted brand choice in both Studies 3 and 4. So, scepticism correlated negatively with explicit brand preference, and brand preference positively predicted brand choice, yet explicit brand preferences in Studies 3 and 4 were different. In Study 3, the association was present when celebrities were paired with brands but not when there was a non-celebrity presented with the brand. Taken together these findings suggest that the presence of the celebrity was important in influencing the explicit responses of individuals with higher levels of ad scepticism.

In contrast to the results showing a relationship between accuracy-based scepticism and explicit celebrity preferences, in Study 3, high affect-based scepticism was associated with less positive implicit celebrity brand attitudes. The is an important finding as it is the first time, to my knowledge, that such a link has been identified between general affect-based scepticism and implicit brand responses. The pattern of relationships uncovered here fits with Gawronski and Bodenhausen's (2011) dual process account of cognition and suggests that accuracy-based scepticism is based upon explicit propositional processes (involving reflection upon the truth status and accuracy of advertising claims) whereas affect-based scepticism is based upon associational processes which connect more strongly with implicit attitudes Figure 8.1 (see page 101) attempts to depict this process. This was not a finding which emerged in Study 6, however, which highlights important differences between young adults and children.

Study 6 re-introduced the implicit measure, to explore both the explicit and implicit preferences of children. In the overall sample, implicit preference results showed that 14year-olds had higher implicit preference for brands presented alone, which was in contrast to their explicit responses where known celebrity paired brands were preferred. Furthermore, there was a correlation between explicit celebrity brand preference and implicit preference. In the overall sample of children, those with lower explicit celebrity preference were more likely to have lower implicit preference for well-liked celebrity paired brands also. As predicted by Rozendaal, Buijs et al. (2016), this finding supports the notion that dual processes interact and that associational implicit preferences could be triggered if recognition of manipulation and persuasion occurs. Further analysis by age group showed this to be representative of the older children only. This was depicted in a new model of well-liked celebrity advertising for older children, which suggests that both explicit and implicit responses interact (see Figure 10.1, page 136). For the younger children there was no relationship between well-liked celebrity explicit brand preference and implicit preference. Cognitive developmental theories suggest that processing of advertisers' intention is limited in younger children and, according to the cognitive defence stance, even if young children can process the intent adherent to advertising, they still have to connect up other responses to apply it in their defence. This connective process doesn't seem to occur in the same way in younger children. With an inability to consciously process the intent of the celebrity effect, there is no opportunity for the effects of manipulation to transfer to the implicit preferences.

As Rozendaal, Buijs et al. (2016) proposed, it seems likely that the celebrity effect in advertising results mainly from the triggering of implicit, associative evaluations. Recognising manipulation triggers negative feelings which then impact on attitude and

scepticism, so a negative implicit response is then picked up on in explicit responses. This did not seem to happen in the sample of young adults in Study 3 as no relationship between affect-based scepticism and explicit responses was found. However, higher levels of affectbased scepticism present in the older children (in the well-liked condition) of Study 6 was related to lower explicit celebrity paired brand preference. In Study 6, children were asked to make prior evaluations of the celebrities and brands (one week before the explicit and implicit preference testing), which may have encouraged engagement with propositional evaluations. At the time of testing recognition of manipulation could have triggered feelings which impacted on attitudes and scepticism against the celebrity, which then transferred to children's explicit preferences. If this is the case then this has implications for the way in which advertising operates and, if Heath's (2012) view is correct, it may be that to some degree the success of celebrity endorsement rests upon not encouraging consumers to engage in explicit propositional evaluation of advertisements where celebrity endorsement occurs. In line with the cognitive defence view, the relationship between affect-based scepticism and explicit celebrity brand preference was only be seen in the older children, who are considered able to recognise the manipulation attempt.

Whilst Rozendaal, Buijs et al. (2016) suggest that both explicit and implicit responses interact, with recognition of manipulation triggering feelings impacting on attitudes and scepticism, cognitive developmental theories suggest that processing of advertisers' intention is limited in younger children. This offers an explanation as to why the correlation between explicit preferences and implicit preference present in older children was absent in younger children. According to the cognitive defence stance, even if young children can process the intent adherent to advertising, they still have to apply it in their defence. This process doesn't seem to occur in the same way in younger children, which explains why fewer correlational relationships emerge in comparison to the older children. With an inability to consciously process the intent of the celebrity effect, there is no opportunity for the effects of manipulation to transfer to the implicit preferences. Model 10.2 (see page 141) shows the limited correlations which emerged from the younger children in the well-liked celebrity group.

For both the older and younger children in the known celebrity condition of Study 6, all correlations highlighted in the well-liked condition were not replicated when brands were paired with known celebrities. For older children the negative effect of scepticism was only shown when a well-liked celebrity was present, which could suggest that older children may be immune to celebrity advertising, and it is only when they have an emotional response to the celebrity that scepticism is triggered. In an advertising situation where a well-liked celebrity was present, young children's scepticism was negatively related to explicit brand choice, and so, whilst there was no relationship with explicit celebrity preferences, scepticism was triggered. This was not found when a known celebrity was used. For both older and younger children, accuracy-based and affect-based scepticism were positively correlated, which could suggest that implicit and explicit processes may interact.

In conclusion, the studies presented throughout this thesis have provided overwhelming support for new dual-processing models of celebrity advertising to be created.

As has been demonstrated, findings from children and young adults suggest that a "one size fits all" model cannot explain explicit and implicit processes. Whilst there has been evidence to suggest that explicit and implicit responses may operate independently in young adults (in support of the research of Forehand and Perkins, 2005), findings provided from older children suggest that both explicit and implicit responses may interact in this age group, with recognition of manipulation triggering feelings impacting on attitudes and scepticism (Rozendaal, Buijs et al., 2016). In support of cognitive developmental theories, it has been suggested that processing of advertisers' intention is limited in younger children. With an inability to consciously process the intent of the celebrity effect, there is no opportunity for the effects of manipulation to transfer to the implicit preferences - a relationship which emerges in older children.

Whilst the models created as part of this thesis are relevant for celebrity advertising, they may not be appropriate for research in explaining alternative advertising techniques. Future research would be useful in exploring the processes involved in these varying advertising techniques and would provide a more solid foundation for the growth of advertising research. Furthermore, the models that have been proposed throughout this thesis may not take into account individual differences - for example, exposure time to electronic media and televisions, parental control, and personal liking of celebrities may also play an integral role. It could be that not all of the children tested regularly engaged with the opportunity to be "advertised to" - some may actively choose to fast forward through ads, whilst others may enjoy watching them as part of their TV viewing. Whilst once we were unable to avoid ads, it is increasingly possible to avoid some advertising material - for example online streaming and Netflix, which may not be accounted for in these models.

11.4 Strengths and limitations

As the strengths and limitations pertaining to each study have been discussed in the individual empirical chapters, here the strengths and limitations of the research as a whole have been addressed.

A particular strength of this thesis was that it incorporated an implicit measure to explore both explicit and implicit responses in children. As highlighted in the literature review (see section 1.2.5), there is very limited research which has included an implicit measure to explore preferences, and this is particularly lacking in children. This was surprising considering research has highlighted the vulnerability of young children. Exploring both explicit and implicit preferences, and how they interact, is a unique contribution of this research and has allowed for a deeper understanding of how celebrity advertising is processed both explicitly and implicitly. Furthermore, a scale of accuracy-based scepticism and a scale for affect-based scepticism was created to examine whether levels of scepticism can offer resistance to celebrity advertising. Again, this offers a unique contribution to the existing literature - particularly when considering the affect-based scepticism measure. Very few studies have successfully attempted to explore affective responses, and those that had, used short 2 or 3 item scales. The affective-based scale created here, whilst needing further validation, showed to be a reliable scale, and it is hoped that this

is used in future research. In sum, a fundamental strength of this thesis is that it has attempted to look at the underlying relationships between different types of general advertising scepticism and both explicit and implicit responses to brands and how these different responses impact upon brand choice. Doing this has allowed for the exploration of underlying cognitive processes in a way that has not been done previously. More work is required in this area, but this thesis has provided an important platform for which further work can expand. This research demonstrates the complexity of responses and how sensitive responses to advertising are under different conditions, and this points to the need for caution in using a "one size fits all" account of how children respond to advertising.

A further strength of this thesis was the number of participants recruited for each of the studies. All six studies had large sample sizes and in the latter two studies where children of different ages were studied, sample sizes were large in each of the individual age groups. In the limited literature which does incorporate an implicit measure, sample sizes tend to be small due to the requirements of individual testing. Being able to collect IAT data from over 200 children is a considerable strength of this thesis and adds significantly to the advertising field of research.

Findings from each of the studies reported in this thesis complement each other and allowed for further exploration of celebrity advertising. Whilst conducting six empirical studies was not part of the initial trajectory of the PhD, the findings which emerged from the samples of young adults allowed for a deeper exploration of the effect of celebrity advertising, which in itself adds knowledge to the advertising literature. Exploring further the lack of resistance to the celebrity effect in young adults strengthened the later studies with children which, overall, has enabled a more comprehensive thesis to be written. Study 6 was not just useful for contextualising the findings of the thesis as a whole, but also provided many novel findings which has pushed the importance of this research area forward.

As discussed throughout this thesis, the methods and scales used in each of the studies differed. Whilst there were appropriate reasons for these changes as the focus of the thesis progressed, it is difficult to infer any comparative conclusions. A limitation of the later studies (Studies 4, 5 and 6) was that the celebrities weren't chosen by each individual participant. Where the participants in Studies 1 to 3 rated a wide range of celebrities with their top four being selected for use in the experimental trials, for the later studies all children rated the same celebrities and these same celebrities were used throughout the study. Although pilot studies were conducted with children and adults of appropriate ages, and the celebrities were chosen on this basis, these later studies could not take into account individual differences in celebrity liking and, for some children, this meant that they were being tested with celebrities that whilst most others considered "well-liked" they had either a dislike or no particular liking/disliking for. For the later studies, when testing of children was of paramount importance, it was not practical or possible in the timeframe given to allow for children to be tested completely independently - for a large sample size to be achieved the initial liking of celebrities and brands alongside initial scepticism levels needed to be tested on a whole class basis so to reduce disruption in the class, and also to allow for a large sample size. The nature of this research caused some inconvenience to the schools, which

meant that school recruitment was difficult. The number of visits to the school for pre- and post-testing meant visiting classes over three consecutive weeks, and during the IAT testing the researcher remained in the school over one or two days testing children for 30 minutes in small groups.

A further limitation of this research could surround the brands that were used in the later studies. Whilst all of the brands were selected on the basis of them being known to the participants but not market leaders in their field, the brands being rated and selected were all for different products from different markets – for example, beauty, food and sport. Whilst this ensured limited bias, for example to those with no interest in sport, beauty, and so on, it could be that judging brands from different markets is difficult for younger children as comparisons are being made across categories that children don't consider to be comparable or congruent. Research shows that until a certain age, children can be fixed in their thinking, so it could be that comparing food brands with sporting brands and being asked to choose between them may be cognitively demanding, especially for the younger children within the studies. Furthermore, it could be possible that the "fit" of the celebrities used was clearer for the participants to identify for some of the brands yet not others which could have impacted upon their preferences. Research by Ilicic and Webster (2014) suggested that making a celebrity with whom consumers have a strong attachment the focal point of the ad can lead the celebrity to overshadow the brand and enhance brand attitude. Ilicic and Webster (2014) claim this occurs regardless of whether they perceive the celebrity and brand to match or mismatch (Ilicic & Webster, 2014). In contrast, however, Mishra (2015) found that the believability of an ad was significantly higher when presented with a congruent celebrity which, if true, would have likely had some bearing on the results presented in this thesis.

One of the criticisms of the work of Rozendaal, Bujis et al. (2016), raised in section 1.3, was that the research was conducted at one single time point in a school environment, which may not be considered to be representative of a typical advertising situation where consumers are exposed to ads in different environments at many different times. Whilst Rozendaal, Buijs et al. (2016) found that forewarning about ads was beneficial to children, the effects of this in the long term remain unclear. This is also a limitation of the studies reported in this thesis. Although Study 6 was conducted with the same children over three consecutive weeks, testing for brand liking at a much later time point would be beneficial to this research also, in an attempt to resolve this experimental limitation and explore how brand liking and brand choice relates to actual purchases and/or purchasing preferences. Many advertised products that consumers are exposed to are often only seen when shopping in supermarkets, and therefore there is an assumed link between responses to advertising and purchase behaviour. As with many of the previous studies discussed which have explored attitudes to brands and brand liking, the studies presented in this thesis did not measure actual consumption behaviour, but rather brand choice was considered to be a proxy for behaviour. A limitation of this it that it cannot be assumed that purchase intentions and purchase behaviours necessarily match.

Lastly, it must be considered that the brands used in the first few studies were novel brands, created by the researcher to explore the effect of well-liked celebrities on responses

to brands that the participants had no prior knowledge of. It should therefore be recognised that the brands presented may actually be viewed by participants as images or logos, rather than representing a wider "brand". First, simple pairing of celebrity images and brands with no endorsement of the brand was intended to help participants to recognise that the celebrity was not really relevant to brand evaluation. Also, novel brands were used to eliminate the possibility that participants already came to the study with prior feelings and beliefs about the brands.

Previous research has been carried out which uses logos as "brands" to examine the success of novel brands when they first appear in a highly saturated advertising market. Reimann, Castaño, Zaichkowsky and Bechara (2012) acknowledged that consumers' responses to new brands on the market are not well understood, and as such their neurophysiological work explored novel versus familiar brands to investigate why some novel brands become popular with consumers. In this research participants were presented with logos for 20 novel brands and 20 self-selected familiar brands, and were asked to rate all 40 on a scale of -1 "negative", 0 "neutral", and 1 "positive". Reimann et al. (2012) found no significant difference in ratings, with both the novel and familiar brands being rated as "neutral", leading them to conclude that differences in affect are more likely to stem from incidental affect (such as mood) rather than any differences in internal representation of the different types of brand under consideration (integral affect). This led to their conclusion that novel brand logos trigger a "lure of reward" (pp. 756) in the same way as familiar brand logos.

In fact, when brands are seen for the first time it could be that simple pairing with well-liked celebrities has a positive associational influence upon evaluative judgments of the brand because there is no other meaningful cue upon which to base the brand judgment. In their discussion of the APE model of Gawronski and Bodenhausen (2011), Smith et al. (2012) also discuss how positive associations could form on the basis of learned propositions stored in episodic memory. However, the results presented in Studies 1 to 3 of this thesis suggest that because novel brands were shown which had no prior meaning to the participants this could not be the case, but rather associations were a result of co-occurrence with the positive stimuli. Taken with the results of Reimann et al. (2012), it seems likely that such associations were formed in my studies by participants who regarded the stimuli as brands.

11.5 Implications

Whilst previous research into the effect of celebrity advertising on children's explicit and implicit preferences is limited, the little body of research which has started to address advertising understanding in children largely agrees that younger children are more vulnerable to advertising because they are not as cognitively developed as older children. In an attempt to make younger children more informed of advertising and its manipulative effects, media literacy and advertising literacy has been recommended. However, this thesis has provided considerable evidence to suggest that this may not be as effective as first thought. By looking at both accuracy-based and affect-based scepticism, alongside both

explicit and implicit preferences, this thesis has shown that the celebrity effect is not straightforward.

Research by Rozendaal, Buijs et al. (2016) suggested that recognition of manipulation triggers negative feelings which activates scepticism, affecting our propositional and associational processing, and findings which have emerged from this thesis have offered support for a dual-processing model of celebrity advertising. The effects of implicit associations and affect-based scepticism demonstrated by the findings in this thesis, go some way to demonstrating that that an ability to recognise ads, and understand their nature and persuasive intent, may not be enough to immunise children against the effects of ads. Coupled with literature suggesting that modern advertising techniques such as advergames and web advertising are more difficult for children to recognise, and the fact that advertising is now more ubiquitous than before, findings presented in this thesis suggest that maybe media literacy training would be more effective if it focused on developing scepticism towards ads both in terms of its accuracy, but also in terms of developing a healthy dislike of ads. As Forehand and Perkins (2005) suggested, implicit effects of celebrity associations with brands are difficult to overcome, and this is problematic.

An important finding to emerge from Study 6, was that in both the younger children (aged eight- to 10-years) and older children (aged 12- to 14-years), very high celebrity liking was directly related to an increased likelihood of explicit celebrity brand preference. Importantly, this relationship appeared to occur independent of scepticism. This was also a finding which arose from the results of the young adults in Study 3 and adds an important contribution not only to the fairly limited research which has looked at the celebrity effect in children, but also to the developmental literature which suggests that as full cognitive development has likely been reached, young adults should be able to resist the celebrity effect. This has implications for the way in which advertising may choose to include celebrities in their campaigns. Hudders et al. (2017) suggested that whilst children do have limited knowledge of advertising and the intent surrounding it (which they called 'dispositional literacy') they also have difficulty applying such knowledge ('situational advertising literacy'). The results presented in this thesis offer some support for this view. This could have implications for the way in which the main conclusions of this thesis are considered, as it could be argued that these findings are only applicable to advertisements where celebrity placement or endorsement feature. However, for the most part this is true – for example the use of celebrities in ads is considered to be the easiest tactic for children to understand, and consequently this was one of the reasons for examining the developmental differences in celebrity advertising.

The results reported throughout this thesis have made clear links to celebrity advertising, and no assumptions that these results would apply to other advertising situations and ads without celebrities have been made. Examination of different advertising techniques would be recommended and beneficial to push literature into this area forward. Furthermore, closer examination of the cognitive processes underlying children's responses and how they develop would be beneficial. The findings reported in this thesis showed greater coherence between scepticism and preferences in older children only, particularly when well-liked

celebrities were involved. This suggests that, for younger children, cognitive links are not being made between these factors, which ultimately influence judgments, which also holds implications for the way in which advertising to younger children occurs.

Throughout this thesis children and young adults have been exposed to celebrity advertising with a range of different celebrities included – some of which were considered to be well-liked, some which were known but not necessarily well-liked and, for the adult samples in the earlier studies, celebrities selected by each participant as being very well liked. For both children and young adults, it was found that having a very high level of liking to the celebrity was related to explicit celebrity brand preference directly - seemingly independent of scepticism. However, for older children, the more sceptical they were about advertising, the less they liked the celebrity brands, which, for the 14-year-olds at least, could explain why explicit preference for brands alone was shown. These findings can be said to offer further support for the earlier argument that where an ad contains no product information to process, reliance on affective attitude becomes important. There were no significant correlations to report from the older children with lower celebrity liking, offering support for the suggestion that it is only when they have an emotional response to the celebrity that scepticism is triggered. This is further supported by the finding that 14-year-olds had an explicit celebrity brand preference in the known celebrity group only - presumably when there was only a limited affective response. These findings highlight how current ad literacy training is likely to be more effective when children are encouraged to reflect on their feelings towards advertising campaigns. Whilst current advertising programmes highlight the importance of increasing advertising literacy and conceptual understanding of advertising intent, the research proposed in this thesis suggests that our affective responses may be more important in influencing our preference than our advertising knowledge.

11.6 Future research

Although the findings of this thesis have provided a considerable contribution to knowledge, there is still scope for various directions in which to extend the research, which are outlined here. The discussion of suggestions for future research partly stems from the limitations and implications that have been outlined here. As discussed in section 1.2, research into the effect of advertising on children of varying ages is limited - particularly in relation to implicit judgements and the effect increased scepticism may have on providing a protective barrier. Results from Study 6 highlighted that it was only the older children, for the well-liked celebrity condition, that coherence between accuracy-based and affect-based scepticism, brand preferences and brand choice occurred. This led to the suggestion that, for this age group, cognitive links are being made between these factors, which ultimately influence judgments. These are correlations which are missing from the younger children, which supports developmental literature that they're not making cognitive connections in the same way as older children. These findings are important and add to the literature surrounding cognitive processes underlying children's responses and how they develop. Future research here is important and is recommended to explore further the cognitive processes which underlie children's responses and how they develop.

Although the implicit responses of young adults were tested in Studies 1 to 3, it has been argued in this thesis that, due to the presentation of the brands, young adults may not have felt like they were being advertised to. This is likely to have resulted in the explicit preference for celebrity paired brands and could also offer an explanation as to why the implicit preferences were always in favour of celebrity brands. Whilst it was predicted from the work of Forehand and Perkins (2005) that implicit preferences would be in line with the celebrity paired brands, research by Rozendaal, Buijs et al. (2016) suggested that, actually, implicit preferences could align with explicit preferences. Based on this assumption, it could have been that with a more realistic advertising method both explicit and implicit responses showed resistance to celebrity brands. However, adults' implicit responses were not tested in later studies, as the focus of the thesis turned to examining the preferences of children, and Study 6 focused on using the IAT method with children only. Future research would benefit from using a more realistic advertising method with adults whilst also incorporating a measure of implicit responses.

Whilst this thesis has explored the effect of celebrity advertising, considered by Rozendaal, Buijzen et al. (2011) to be the tactic first understood by young children (and thus deemed suitable for the age ranges of the children in the studies), there are many advertising techniques which remain unexplored yet children (and adults) are increasingly exposed to. For example, only a limited amount of research has looked at children's understanding of advergames (e.g. Hudders et al., 2016; Hudders et al., 2017) yet with the increase in popularity of smartphones, and the rise of children using iPads, computers and other handheld devices, this line of research is important. Future research should particularly look to incorporate a measure of implicit testing into these studies as this thesis has provided findings to add to only a limited collection of literature.

Additionally, one avenue of research may explore the types of advertisements typically viewed by children in comparison to adults. Whilst there will undoubtedly be some overlap in the advertisements that both children and adults are exposed to, there will also be many instances where ad exposure is different. For example, it is likely that personalised pop-up ads on the internet are tailored differently, and that due to varied interests (in TV viewing, magazine viewing etc.) children and adults are actually exposed to very different ads, each with very different intentions. It could be, for example, that adults are typically exposed to a larger volume of higher premium ads for products such as holidays and cars, that by their very nature require much more conscious reflection than the typical "everyday" products. This may explain why, for brands considered to be fairly low range (as presented in the studies in this thesis), young adults were more inclined to follow their "gut feelings" in favour of the well-liked celebrities. Further analysis of Study 3 showed that young adults scoring higher on the accuracy-based scepticism scale had a lower explicit preference for celebrity paired brands, indicating that, at least in adults, it is their accuracy-based scepticism which counteracts the celebrity effect in their explicit responses. This could be because they are more exposed to ads which require a high level of conscious thought. Exploring responses to higher-range brands aimed at adults, would offer an insightful contribution to the findings discussed throughout this thesis, and could shed some further insight into why

14-year-olds and adults could be different in their advertising understanding, as John (1999) proposed.

Alongside further research into the developmental trends of the effects of alternative advertising tactics, future research would also benefit from exploring the effect of scepticism on these tactics. Whilst the research reported in this thesis has shown that high celebrity liking can override scepticism, celebrity advertising only accounts for a small proportion of the adverts that consumers are now exposed to. It has generally been found in the studies reported throughout this thesis that a negative "gut feeling" towards advertising and a high level of general scepticism can aid both children and adults in defending against the manipulative intent of celebrity advertising. Research which examines the effect of scepticism on other advertising techniques would fruitfully add to the literature, and it would be encouraged that both accuracy-based and affect-based scepticism measures are retained.

Future research should also look at validating the scale adapted for use with children in Studies 5 and 6. The scales from which the author's own scale was created were designed for research in America (Obermiller & Spangenberg, 1998) and the Netherlands (Rozendaal, Opree et al., 2016) although the adapted scales retained high reliability when used with children in the United Kingdom, even when the scale was adapted to ensure the reading age was made appropriate for the younger children in the sample. Whilst there was no evidence of the younger children having difficulty with the questions in the scales, and completion rate of the scales for the eight-year-olds remained as high as that of the other ages, the scales would benefit from further testing and validation. Whilst it was assumed throughout the reporting of the findings that the younger children displayed lower levels of scepticism than their older counterparts due to reduced cognitive development, it should not be dismissed that the lower levels was instead due to lack of understanding. More testing of the scale would hopefully allow for the scale to be validated, to provide future research in the area to test both accuracy-based and, importantly affect-based (for which a scale is currently lacking) to be used in a wider spectrum of research.

Whilst it is recommended that future research attempts to validate the scales created to test for scepticism in children, it would also be of benefit to test the scales on a sample of young adults. Study 6 provided important findings in relation to high celebrity liking, scepticism and explicit brand preference to highlight that when a celebrity was particularly well-liked, explicit preference for a celebrity paired brand increased - seemingly independent of scepticism. Reanalysis of the scale used with young adults in Study 3 also highlighted the same finding - high celebrity liking was related to high explicit preference for celebrity brands. However, the explicit preferences of the young adults (Study 3) and those of the older children (Study 6) were different, and young adults showed a preference for celebrity brands, whilst older children still showed some resistance and instead had an explicit preference for brands presented alone. Although the young adults in Study 3 completed a scale of scepticism, this was retrospectively divided into accuracy-based and affect-based scepticism and each scale only consisted of three items, whereas the older children were presented with scales of six items (accuracy-based) and five items (affect-based). It has been suggested throughout this thesis that, for older children, affect-based scepticism may have been

important, so re-running the method of Study 6 with young adults, including the full scepticism scales, would be beneficial and would allow for more direct comparisons between younger adults and older children. An alternative suggestion as to why older children and young adults had different explicit preferences was because the presentation method in Study 3 was considered to be less true to modern advertising, which could have affected young adults' scepticism. Again, running the method of Study 6 with young adults would allow for a closer comparison of the results across young children, older children and young adults.

The studies in this thesis have focussed solely on the effect of well-liked celebrities in comparison to either a non-celebrity, a known celebrity, or no celebrity at all. What these studies have not addressed is the potential effect that disliked celebrities may have on brand preferences. As highlighted earlier in this discussion, it is possible that some of the celebrities in the known celebrity condition may actually have been considered disliked, which could have lowered brand evaluations in a way not measured or accounted for in this study. Considering the literature of Till and Shimp (1998) which suggests that negative information of the celebrity lowers brand evaluations, it would be beneficial to address this in future research. The last three studies reported in this thesis used an advertising format which replicated a typical advertising scenario, and known celebrities were used to again mimic a true to life advertising event where we see celebrities (to whom we may have no particular liking) advertising products. This thesis also investigated liked celebrities. However, there are many advertising campaigns which are considered to be generally disliked because of the associated celebrity/figure, that remain highly popular brands. Investigating the effect of disliked celebrities, therefore, would add an interesting strand to this body of research. Furthermore, future work might usefully vary the extent to which the celebrity is clearly involved in a persuasion attempt in order to investigate whether and how feelings of being manipulated influence consumers' brand judgments and whether strong liking for celebrities can override such feelings.

Lastly, it would be of benefit to develop a less experimental method. Büttner et al. (2014) have criticised research into advertising preferences, claiming that testing children experimentally may not accurately represent the purchasing intentions at times of consumption. Studies which would require children and young adults to engage in some sort of purchasing assessment would add a valuable contribution to the advertising literature and would better reflect a more true to life advertising scenario.

11.7 Unique contribution to knowledge

There is a substantial lack of literature which has explored the developmental nature of celebrity advertising and the effect it has on children's implicit and explicit brand judgments. In itself, this thesis offers valuable research findings from which future research can extend the field. To date, there is no research which has examined how accuracy-based and affect-based scepticism are related to explicit *and* implicit attitudes to brands and brand choice, and this is the first research to my knowledge to demonstrate that implicit defences against the celebrity effect can be maintained where there is a high level of scepticism about advertising. Furthermore, this research has shown that both young adults and children can hold different

explicit and implicit preferences towards celebrity advertising, suggesting that a dual-process model of celebrity advertising is needed. This thesis has proposed new models of celebrity advertising which each offer an insightful and unique contribution to the limited literature in this field. As has been discussed earlier in the discussion, findings from children and young adults suggest that one model alone cannot explain both explicit and implicit processes in different age groups. Whilst there has been evidence to suggest that explicit and implicit responses may operate independently, findings have also suggested that both explicit and implicit responses may interact, and therefore several models of celebrity advertising have been developed and discussed, as appropriate.

11.8 Conclusion

To conclude, this thesis brings together six studies which examined the effect of celebrity advertising on children's and young adults' explicit and implicit preferences and brand choice. Research in this area is particularly limited, especially concerning the testing of young children's implicit preferences. Furthermore, it has examined the effectiveness of two differing types of scepticism (accuracy-based and affect-based) through scales adapted specifically for this research, to explore whether being sceptical of advertisers' intent can act as a protective buffer of resistance. Following developmental literature and theory, this thesis has addressed existing literature to observe whether increasing age (and therefore increasing cognitive ability) aids in consumers ability to resist the celebrity effect. Previous literature has suggested that advertising literacy children given to young children would be beneficial in increasing their understanding of intent, and thus would raise their scepticism levels. The studies in this thesis have found that, in terms of the celebrity effect, high liking towards a celebrity is directly related to an increase in celebrity brand preference - a relationship which emerges seemingly independent of scepticism. This suggests that such interventions would be more successful if they incorporated information to encourage a healthy dislike against advertising campaigns. However, research should now look at extending into other realms of advertising with various alternative tactics.

Overall, future research should now aim to expand upon the current work to address a number of further research questions, for example, the extent that celebrity disliking has on preferences and brand choice, and whether scepticism in this instance can be overridden. Additionally, it would also be of benefit to test the effect being asked to reflect on levels of affect-based scepticism (our "gut feeling") towards advertising has on the developmental trajectory of advertising understanding, and it would be particularly beneficial to also examine young adults' implicit preferences. Whilst one justification given to explain young adults' lack of resistance to the celebrity effect in the earlier studies was that high liking of the celebrity operated independently of scepticism in the sample of young adults, an additional explanation offered in discussion of the older children's ability to resist the celebrity effect was because their "gut feeling" was brought into line with their conceptual understanding of advertising intent. Whilst children completed a standalone scale to assess affect-based scepticism, which could have brought their feelings into conscious reflection, for the young adults it could be argued that their affect-based scepticism overrode propositional

processes which counteracted their scepticism. Exploring the effect of scepticism scales which test affective responses would be beneficial. Lastly, a longitudinal study to test the long term effects of celebrity advertising would be beneficial. Whilst Study 6 was a three-week study, and brand preference was not shown to be maintained during this time, exploring the effect of repeated exposure over a longer time period would be beneficial and would add a valuable contribution to the literature. Testing children's and young adults' actual purchasing behaviour would also satisfy critics who identify that what consumers say they would do, and how they actually act, may be different.

In sum, this research has demonstrated that the celebrity effect is not straightforward – children and young adults respond differently to brands paired with celebrities they have high liking for compared with those that are simply known. Furthermore, evidence of a dual-process approach emerged and, consequently, new models of celebrity advertising were created. Throughout the findings presented in this thesis, the effect of scepticism differed, highlighting that it is important to consider both accuracy-based and affect-based scepticism and the effect it has on brand preferences and brand choice. This has been captured in the new models created. Importantly, in relation to celebrity liking, a particular high liking for a celebrity was related to celebrity brand preference - seemingly independent of scepticism. This finding alone holds many implications for the way in which advertising literacy is approached, and the way in which advertisers may choose to market their products.

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13 Appendices

3.1 Study 1 – Novel brand logos used





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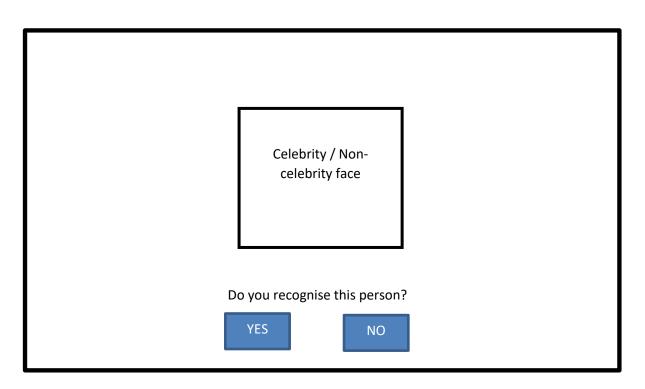


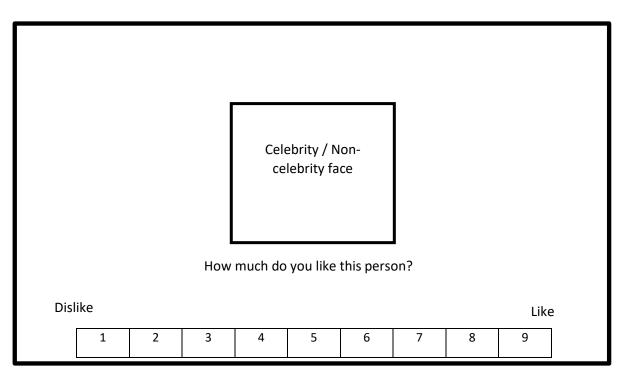
Zooooom

3.2 Study 1 – Stimuli presented on screen

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

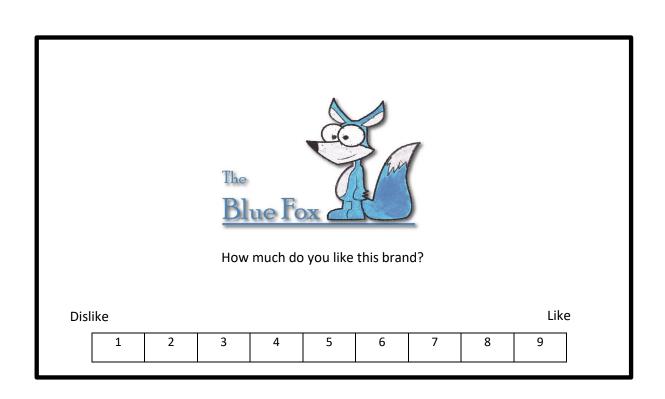
Stage 1 - Initial explicit brand/celebrity/non-celebrity evaluation



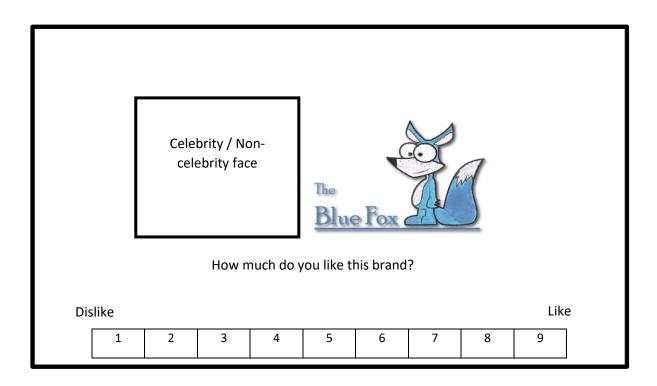


 ${\bf Stage~1 - Initial~explicit~brand/celebrity/non-celebrity~evaluation}$





 ${\bf Stage~2~- Presentation~of~selected~brands~paired~with~celebrity/non-celebrity~images}$



3.3 Study 1 – Ethical approval letters



RESEARCH AND ENTERPRISE SERVICES

21st October 2013

Hayley Gilman School of Psychology Dorothy Hodgkin Building

Dear Hayley,

Re: Implicit and explicit effects of advertising on adults' brand judgements

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	1	August 2013
Invitation Letter	1	August 2013
Information Sheet	2	October 2013
Consent Form	1	August 2013
Debrief	1	August 2013

If the fieldwork goes beyond the date stated in your application June 2014, you must notify the Ethical Review Panel via the ERP administrator at 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_stating ERP1 in the subject line of the e-mail.

Yours sincerely

88

Dr Andrew Rutherford Vice Chair – Ethical Review Panel

Research and Enterprise Services, Keele University, Staffordshire, ST5 5BG, UK
Telephone: + 44 (0)1782 734466 Fax: + 44 (0)1782 733740



RESEARCH AND ENTERPRISE SERVICES

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Hayley Gilman School of Psychology Dorothy Hodgkin Building

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Re: Implicit and explicit effects of advertising on adults' brand judgements

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Yours sincerely

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Dr Andrew Rutherford Vice Chair – Ethical Review Panel

Research and Enterprise Services, Keele University, Staffordshire, ST5 5BG, UK
Telephone: + 44 (0)1782 734466 Fax: + 44 (0)1782 733740

3.4 Studies 1 & 2 – Recruitment information for the Research Participation System

Dear all,

I am a PhD student in the School of Psychology, and I would like to tell you a bit about my interests, and a study which I am currently looking for participants. As undergraduate students in the school, I would like to give you the opportunity to participate in my study, in exchange for 30 minutes Research Participation Time (RPT) towards your course.

In my research I want to get a better understanding of how individuals respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children are able to understand that the aim of ads is to persuade us to buy something and that by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. However, this is based on the assumption that ads aim to influence our conscious judgments, whereas many aspects of advertising are actually aimed at influencing how we feel about products. By associating products with things that we like or people that we admire, advertisers hope that positive affective responses to the paired item will transfer onto our response to the brand – a process called 'affect infusion'. Because our affective responses can occur below the level of conscious awareness, they may not be under conscious control. I am interested in whether we can detect evidence of affect infusion in responses to brands and the extent to which adults are able to guard against its influence in their conscious brand judgments. The proposed study looks at whether pairing a celebrity with a brand influences subsequent brand responses.

If you would like to participate in this study then please log in to the on-line RPT system and choose a time slot suitable for yourself. This study will last for no longer than 30 minutes, and 30 minutes of RPT will be credited towards your course, after completion of the study. You will be required to read an information sheet before commencing with the study, and you will have the opportunity to ask any questions you may have. If you are then happy to participate, I will ask that you sign a consent form. A letter of debrief will be given after the study has been completed. If you have a concern about any aspect of this study, or would like more information, you can email me at h.gilman@keele.ac.uk

Many thanks

Hayley Gilman

3.5 Study 1 – Parental opt-out letter

Dear Parent / Guardian,

My name is Hayley Gilman and I am a part-time PhD student in the School of Psychology at Keele University. I am writing to tell you about research that we are carrying out in schools across Staffordshire and Shropshire. Details of the research are given below. If, after reading this information, you decide that you do NOT wish your child to take part in the research then please complete the reply slip and return it to the school by (DATE). If you do not complete the reply slip I will assume that you are willing for your child to participate in the research. If you do not complete the reply slip but subsequently decide you do not wish your child to take part in the study please contact Hayley Gilman by email (see below) or contact (headteacher details). If your child has already taken part in the study it will not be possible to withdraw the data s/he provides as there will be no way of identifying the responses of any individual child from the information provided.

In our research we want to get a better understanding of how children respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children understand that the aim of ads is to persuade us to buy something and that by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. However, this is based on the assumption that ads aim to influence our conscious judgments, whereas many aspects of advertising are actually aimed at influencing how we feel about products. By associating products with things that we like or people that we admire, advertisers hope that positive affective responses to the paired item will transfer onto our response to the brand – a process called 'affect infusion'. Because our affective responses can occur below the level of conscious awareness, they may not be under conscious control. We are interested in whether we can detect evidence of affect infusion in children's responses to brands and the extent to which children between the ages of 8 and 15 years are able to guard against its influence in their conscious brand judgments. The proposed study looks at whether pairing a celebrity with a brand influences children's subsequent brand responses.

All of the tasks will be presented on computer. There are five stages. At Stage 1 children will be presented with head and shoulder photographs of celebrities, non-celebrities, real brand logos and fake brand logos (that we have created). They will simply be asked to rate how much they like the person or brand. At Stage 2 we will assess children's awareness of celebrity endorsement as an advertising technique using a small number of questions used in previous research. At Stage 3 the computer will automatically select eight fake brands that were rated neutrally and randomly pair them with four celebrities who were liked a lot and four non-celebrities who were rated neutrally. The pairs of photographs will be presented together on screen and children will be asked to look at the brand and rate how much they like it (Explicit Brand Evaluation). At Stage 4 children will take part in a standard Implicit Association Test (IAT). The 4 celebrity brands and 4 non-celebrity brands from Stage 2, plus 4 positive attribute words (e.g. fun, happy) and 4 negative attribute words (e.g. fear, sad) will be presented in sequence. Participants will be required to identify each stimulus (e.g. as a celebrity brand, a bad word and so on) as quickly and accurately as possible using two computer keys. The IAT will detect if affect infusion has occurred by revealing any underlying preference for the celebrity brands. (Implicit Brand Response). Such tests have been widely used in research with adults and children as young as 4 years old and in our pilot study children enjoyed taking part in the task. Finally, Stage 5 will require the children to select the three brands that they liked the most (in rank order). This study will allow us to compare children's conscious and non-conscious responses to the brands and identify any relationship with pre-existing advertising knowledge and final brand choice. This dataset will be collected for use in its own stand-alone study, although naturally the data may be used in future research studies, to act as a baseline measure. It is expected that this data will provide a means of comparing the responses of adults and children, although this will be in future studies.

All year 4, year 5 and year 6 children are being asked to take part and I would like to request your consent for your child to participate in this research. Taking part in this task should take up about 30 minutes per child. Before the start of the tasks it will be made very clear to each child what is going to happen and that they do not have to take part if they don't want to and that they can opt out at any time without having to give a reason. The children's responses will be treated in confidence. Anonymous numerical data from the questionnaires will be stored securely in an electronic database which will be made available for other researchers to use.

If you have a concern about any aspect of this study, you should speak to Hayley Gilman (details below). You can also contact either of Hayley's supervisors: Martin Rowley on m.g.rowley@keele.ac.uk or Sue Sherman on s.m.sherman@keele.ac.uk. If you remain unhappy about the research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please contact: Nicola Leighton, Research Governance Officer, Research & Enterprise Services, Dorothy Hodgkin Building, Keele University. ST5 5BG; Tel: 01782 733306.

If you have any queries regarding this research please do not hesitate to contact me: Hayley Gilman Email: h.gilman@keele.ac.uk

Yours faithfully, Hayley Gilman		
REPLY SLIP:		
Please return to XXXX		
I DO NOT give permission for (child's name)		to take part.
Child's year group: Child's Class:		
PRINT NAME:		
SIGNED:	DATE:	



Information Sheet

Study Title: *Implicit and explicit effects of advertising on adults' brand judgments.*

Introduction

This research is being undertaken by Hayley Gilman – a PhD student in the School of Psychology. Research into individual's understanding of advertising has tended to focus upon the age at which they develop 'advertising literacy' skills (Young, 2003). The ability to recognise advertising and understand its persuasive and commercial intent (i.e. realising that ads aim to influence people to buy something) has been seen as providing children with protection against advertising's potential adverse effects. Because it has been assumed that such skills are based upon the ability to consciously process and reflect upon information about advertising, most of the work investigating the development of advertising literacy skills has examined children's explicit knowledge of advertising. Recently, however, researchers have begun to question whether the possession of advertising literacy skills, as demonstrated in their explicit judgments, actually does make individuals less susceptible to the effects of advertising. Heath and Feldwick (2007) have argued that much of advertising works by influencing consumers' emotional responses by encouraging them to acquire positive affective associations with brands at a non-conscious, 'implicit' level. Implicit knowledge is not available to conscious reflection, involves automatic processes, and may influence a person's behaviour without them being aware of it. Hayley's research is currently looking at whether adults show a disassociation across a range of advertising techniques, and will investigate how explicit and implicit attitudes influence their final brand judgments.

Aims of the Research

In our research we want to get a better understanding of how children and adults respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children understand that the aim of ads is to persuade us to buy something and that by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. However, this is based on the assumption that ads aim to influence our conscious judgments, whereas many aspects of advertising are actually aimed at influencing how we feel about products. The proposed study looks at whether pairing a celebrity with a brand influences subsequent brand responses.

Invitation

You are being invited to consider taking part in the research study *Implicit and explicit effects* of advertising on adults' brand judgments. This project is being undertaken by Hayley Gilman, supervised by Martin Rowley and Sue Sherman.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with the researcher if you wish. Ask if there is anything that is unclear or if you would like more information.

Why have I been chosen?

We have recruited a group of Psychology undergraduate students to participate in this project. As a Psychology student you were eligible to volunteer.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to sign two consent forms, one is for you to keep and the other is for my records. You are free to withdraw from this study at any time and without giving reasons.

What will happen if I take part?

You will be asked to complete a series of short computer tasks. Firstly you will be shown a series of faces and brands, and for each one you will be asked to state how much you "like" the person or brand. The programme will randomly pair a previous face with a brand, where you will again be asked how much you like the brand. During stage 3 you will be asked to complete an Implicit Association Test (IAT) where you will be asked to identify certain stimuli as quickly and as accurately as possible. Such tests have been widely used in research with adults and children as young as 4 years old and in our pilot study participants enjoyed taking part in the task. Finally you will be asked to select the three brands that you liked the most (in rank order).

What are the benefits (if any) of taking part?

By participating in this study you will receive 30 minutes of Research Participation Time (RPT) towards your course credit.

What are the risks (if any) of taking part?

There are no known risks of taking part in this study.

How will information about me be used?

The computer programme will record all responses given, and will be used in my PhD thesis. It is also possible that that I will use the data collected in a research article to be submitted for publication in a journal. Anonymous numerical data from the questionnaires will be stored securely in an electronic database which will be made available for other researchers to use. This dataset will be collected for use in its own stand-alone study, although naturally the data may be used in future research studies, to act as a baseline measure. It is expected that this data will provide a means of comparing the responses of adults and children, although this will be in future studies.

Who will have access to information about me?

Only my two supervisors and I will have access to the data. Anonymity can be assured – all names will only be used on the consent forms, which will be locked in a secure filing cabinet, so that you cannot be identified in any way. Each participant will be given a participant number at the beginning of the study, so that you are able to withdraw your participation at any time. The computer programme will only have access to participant numbers, and no names will be inputted into the software. Only I will have access to the list of names corresponding to participant numbers. All of your responses will be treated as confidential, i.e. they will not be shared by the researchers with anyone outside of the group. We may use the collective dataset for publication purposes, but no individual data will be shared.

I do however have to work within the confines of current legislation over such matters as privacy and confidentiality, data protection and human rights and so offers of confidentiality may sometimes be overridden by law. For example in circumstances whereby I am made aware of future criminal activity, abuse either to yourself or another (i.e. child or sexual abuse) or suicidal tendencies I must pass this information to the relevant authorities.

Who is funding and organising the research?

The research is being funded by the Research Institute of Social Sciences at Keele University.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact *Hayley Gilman* on *h.gilman@keele.ac.uk*. Alternatively, if you do not wish to contact the researcher you may contact either of the PhD supervisors: *Martin Rowley* on *m.g.rowley@keele.ac.uk* or *Sue Sherman* on *s.m.sherman@keele.ac.uk*

If you remain unhappy about the research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please write to Nicola Leighton who is the University's contact for complaints regarding research at the following address:-

Nicola Leighton

Research Governance Officer

Research & Enterprise Services

Dorothy Hodgkin Building

Keele University

ST5 5BG

 $E\text{-mail:}\ \underline{\text{n.leighton@uso.keele.ac.uk}}$

Tel: 01782 733306

3.7 Studies 1, 2, 3 & 4 – Young adult consent form



CONSENT FORM

Title of Project: Implicit and explicit effects of advertising on adults' brand judgments.

Name and contact details of Principal Investigator:

Hayley Gilman School of Psychology Keele University Staffordshire ST5 5BG

h.gilman@keele.ac.uk

Name of participant

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time.

I agree to take part in this study.

I understand that data collected about me during this study will be anonymised before it is submitted for publication.

I agree to allow the dataset collected to be used for future research projects

I agree to be contacted about possible participation in future research projects.

Date

Please tick box if you agree

Signature

with the statement

3.8 Studies 1, 2 & 3 – Young adult debrief form

The effects of advertising on adults' implicit and explicit responses to brands.

Research into the understanding of advertising has tended to focus upon the age at which children develop 'advertising literacy' skills (Young, 2003). The ability to recognise advertising and understand its persuasive and commercial intent (i.e. realising that ads aim to influence people to buy something) has been seen as providing children with protection against advertising's potential adverse effects. Because it has been assumed that such skills are based upon the ability to consciously process and reflect upon information about advertising, most of the work investigating the development of advertising literacy skills has examined an individual's explicit knowledge of advertising. Explicit knowledge is knowledge that is available to conscious reflection and therefore involves slow, effortful cognitive processes. Because it is possible, at least potentially, to articulate explicit knowledge researchers have typically used techniques such as self-report or rating scales to examine its development. There is still some dispute about exactly when children's advertising literacy skills emerge but recent work has suggested that children begin to demonstrate explicit understanding of the selling intent of advertising (around 8-9 years of age) before understanding its persuasive nature (10-12 years), and that understanding may emerge earlier for some advertising techniques than for others (Rozendaal, Buijzen & Valkenburg, 2010; 2011). Due to the ambiguity of the age at which children develop 'advertising literacy' it is important for us to know how much 'literate' adults are when it comes to advertising.

Recently, however, researchers have begun to question whether the possession of advertising literacy skills, as demonstrated in their explicit judgments, actually does make individuals less susceptible to the effects of advertising. Heath and Feldwick (2007) have argued that much of advertising works by influencing consumers' emotional responses by encouraging them to acquire positive affective associations with brands at a non-conscious, 'implicit' level. *Implicit* knowledge is not available to conscious reflection, involves automatic processes, and may influence a person's behaviour without them being aware of it. Nairn and Fine (2008) identify a number of 'stealth marketing' techniques which may operate in this manner (e.g. celebrity endorsement, product placement) and claim that both children and adults may find it difficult to guard against their implicit effects. In line with this, Forehand and Perkins (2005) found that undergraduates who identified the celebrity in an advertising voiceover were alerted to the advertiser's intention to influence their attitude to the brand. Consequently, their positive attitude towards the celebrity did not transfer to their explicit brand judgment. Despite this, their *implicit* affective response to the brand still changed in line with the advertiser's intention (i.e. a positive relationship was seen between celebrity attitude and implicit brand response). In this research, I looked at whether adults show a similar disassociation across a range of advertising techniques and will investigate how explicit and implicit attitudes influence their final brand judgments.

The proposed study examined whether simply pairing a well-liked celebrity with a brand influences adults' implicit and explicit brand judgments. This simple pairing procedure (with no endorsement) was used in order to give the best opportunity to recognise that the celebrity is not relevant to brand evaluation.

I would like to take this opportunity to thank you for participating in my PhD research. May I remind you that you are able to withdraw your data at any time. If you have any questions about my research, or would like any further information then please don't hesitate to contact me on h.gilman@keele.ac.uk

Many thanks once again,

Hayley

References

Forehand, M. R. and Perkins, A. (2005). Implicit assimilation and explicit contrast: A set/reset model of response to celebrity voice-overs. *Journal of Consumer Research*, *32*, 435-441.

Heath, R. & Feldwick, P. (2007). Fifty years using the wrong model of advertising. *International Journal of Market Research*, 50, 29-59.

Nairn, A. and Fine, C. (2008). Who's messing with my mind? The implications of dual-process models for the ethics of advertising to children. *International Journal of Advertising*, 27, 447-470.

Rozendaal, E., Buijzen, M., & Valkenburg, P. (2010). Comparing Children's and Adults' Cognitive Advertising Competences in the Netherlands. *Journal of Children and Media*, 4, 77-89

Rozendaal, E., Buijzen, M., & Valkenburg, P. (2011). <u>Children's understanding of advertisers' persuasive tactics</u>. *International Journal of Advertising*, 30, 329-350

Young, B. (2003). Does food advertising influence children's food choices? A critical review of some of the recent literature. *International Journal of Advertising*, 22, 441-459.

3.9 Study 1 – Verbal debrief given to children

Verbal Debrief Script

Thank you very much for taking the time to help me with my study. The study is looking at whether pairing a well-liked celebrity with a brand influenced your brand judgments or preferences, as I am interested in looking at whether children are easily influenced by television adverts, even if they don't even know it! The computer tasks you just did will help me to see how much children are influenced by adverts, as well as allowing me to see what sort of brands children like the most. You have been very helpful by taking part today.

4.1 Study 2 – Novel brand logos used

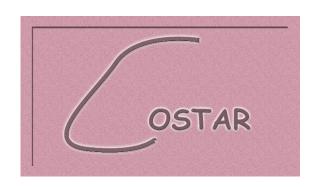












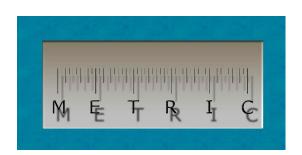


















4.2 Study 2 – Taglines to accompany novel brands

Aqua - The colour of cool

Avius - Ask for Avius.

Boonex - Buy Boonex. The Number One

Bravura - Modern. Stylish. Classic. BRAVURA!

Cat and Mouse - *Invest in the unlikely*

Costar - Depend on your Costar

FL - Step into the future with FL

Frooty - Experience the Frooty sensation

Get wired - Feel the power

Hourglass - Timeless quality

Iguacy - Try a taste of the tropics

Message in a bottle - The last word in fashion

Metric - Measure the future

Wilderness - A taste of the true outdoors

Willow - Relax in style

5.1 Study 3 – Brands used

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

Brands used:		
Aquafresh		
Lacoste		
Nivea		
Motorola		
Chanel		
Subway		
Puma		
Heinz		

5.2 Study 3 – Questionnaire used

Advertising Literacy

1. Please ask the experimenter to input your participant number. This is so we can match your responses to this survey with your responses on the computer tasks. *
2. What is your gender? *
Male Male
Female
3. What is your age? *

Yes, definitely
Yes, I think so
No, I don't think so
No, definitely not
5. Please watch the following video. Is this an advertisement? *
Yes, definitely
Yes, I think so
No, I don't think so
No, definitely not
6. Please watch the following video. Is this an advertisement? *
Yes, definitely
Yes, I think so
No, I don't think so
No, definitely not

4. Please watch the following video. Is this an advertisement? *

To make you buy the advertised product	
To help people learn about the products	
To get people to recall the products	
To get people to believe what the ad says	
To make people like the product	
8. Advertisements costs money.	Who do you think pays to make ads? *
The TV network, magazine, website etc	. that carries the ads
The people who created this questionna	iire
The companies that make the products	in the edge
The companies that make the products	in the aus
The people featured in the ads	
Other (please specify):	
Cutor (produce opeony).	
_	I. Who do you think is the intended audience of
this ad? Please be as precise as	possible. *

7. The following statements describe five possible reasons why celebrities are used in advertisements. Please rank the statements in order of importance (with 1

being the most important). *

10. Please look at the following ad. Who do you think is the intended audience of this ad? Please be as precise as possible. *
11. Please look at the following ad. Who do you think is the intended audience of this ad? Please be as precise as possible. *
12. Are advertisements there to make you want the advertised products? *
Yes, definitely
Yes, I think so
No, I don't think so
No, definitely not

	Yes, definitely	
	Yes, I think so	
	No, I don't think so	
	No, definitely not	
	14. Are advertisements there to make you think position product? *	ively about the advertised
	Yes, definitely	
	Yes, I think so	
	No, I don't think so	
	No, definitely not	
	15. Advertisements often show happy people together The following statements describe five possible reas statements in order of importance (with 1 being the restaurance)	ons for this. Please rank the
To h	To help people learn about the products	
To g	To get people to recall the products	
To g	To get people to believe what the ad says	
To n	To make people like the ad	
To n	To make people buy the advertised product	

13. Are advertisements there to make you feel positively about the advertised

product? *

To help people learn about the products	
To get people to recall the products	
To get people to believe what the ad says	
To make people like the ad	
To make people buy the advertised product	
17. Advertisements are often pron product is purchased. The followi this. Please rank the statements in important). *	ng stat
To help people learn about the products	
To get people to recall the products	
To get people to believe what the ad says	
To make people like the ad	
To make people buy the advertised product	
18. How often do you think that w in reality? *	vhat yo
Never	
Sometimes	
Often	
Very often	

16. Advertisements are often funny. The following statements describe five

1 being the most important). *

possible reasons for this. Please rank the statements in order of importance (with

Never
Sometimes
Often
Very often
20. How often do you think you can believe advertisements? *
Never
Sometimes
Often
Very often
21. How often do you think advertisements are boring? *
Never
Sometimes
Often
Very often

19. How often do you think advertisements are truthful? *

Never
Sometimes
Often
Very often
23. How often do you think advertisements are irritating? *
23. How often do you think advertisements are irritating? * Never
Never

22. How often do you think advertisements are stupid? $\mbox{*}$

5.3 Study 3 – The scoring system used

Q1. Is this an advertisement? (YouTube clip of an ad)
- Yes, definitely (scores 4)
- Yes, I think so (scores 3)
- No, I don't think so (scores 2)
- No definitely not (scores 1)

Q2. Is this an advertisement? (YouTube clip of an ad)
- Yes, definitely (scores 1)
- Yes, I think so (scores 2)
- No, I don't think so (scores 3)
- No definitely not (scores 4)

Q3. Is this an advertisement? (YouTube clip of an ad)
- Yes, definitely (scores 4)
- Yes, I think so (scores 3)
- No, I don't think so (scores 2)

- No definitely not (scores 1)

- Q4. Please rank (with one being the most important) the reasons that advertisements use celebrities)
- To make people buy the advertised product (ranked 1 by the advertiser)
- To help people learn about the products (ranked 4 by advertiser)
- To get people to recall the products (ranked 2 by advertiser)
- To get people to believe what the ad says (ranked 3 by advertiser)
- To make people like the product (ranked 2 by advertiser)
- * As with the following ranking Qs also, we will only be interested in what the participant ranks as the most important (what they put as number 1). If this matches the advertisers' FIRST intention then they will score 4 ... if it matches their SECOND ranked intention they will score 3 and so on. This matches the original paper.

- Q5. Advertisements cost money. Who do you think pays to make ads?
- The TV network, magazine, website that carries the ads (scores 0)
- The people who created the questionnaire (scores 0)
- The companies that make the product in the ads (scores 1)
- The people featured in the ad (scores 0)
- Q6. Please take a look at the following ad. Who do you think is the intended audience of this ad?
- Q7. Please take a look at the following ad. Who do you think is the intended audience of this ad?
- Q8. Please take a look at the following ad. Who do you think is the intended audience of this ad?
- * For each of the above 3 Qs a score of 1 is given for basic answers and a score of 2 given for elaborate answers.
- Q9. Are advertisements there to make you want the advertised products?
- Yes, definitely (scores 4)
- Yes, I think so (scores 3)
- No, I don't think so (scores 2)
- No, definitely not (scores 1)
- Q10. Are advertisements there to make you <u>feel</u> positively about the advertised products?
- Yes, definitely (scores 4)
- Yes, I think so (scores 3)
- No, I don't think so (scores 2)
- No, definitely not (scores 1)

- Q11. Are advertisements there to make you think positively about the advertised product?
- Yes, definitely (scores 4)
- Yes, I think so (scores 3)
- No, I don't think so (scores 2)
- No, definitely not (scores 1)
- Q12. Advertisements often show happy people together with advertised products. Please rank (with 1 being the most important) why you think this is.
- To help people learn about the products (ranked 3)
- To get people to recall the products (ranked 2)
- To get people to believe what the ad says (ranked 2)
- To make people like the ad (ranked 1)
- To make people buy the advertised product (ranked 1)
- Q13. Advertisements are often funny. Please rank (with 1 being the most important) why you think this is.
- To help people learn about the products (ranked 4)
- To get people to recall the products (ranked 2)
- To get people to believe what the ad says (ranked 4)
- To make people like the ad (ranked 1)
- To make people buy the advertised product (ranked 3)
- Q14. Advertisements often promote a "freebie" (free product) when purchasing the advertised product. Please rank (with 1 being the most important) why you think this is.
- To help people learn about the products (ranked 3)
- To get people to recall the products (ranked 2)
- To get people to believe what the ad says (ranked 3)
- To make people like the ad (ranked 2)
- To make people buy the advertised product (ranked 1)
- * In line with the Rozendaal, Opree and Buijzen's (2014) paper, a mean score will be computed for Q12-14 for each participant.
- ** As with the previous ranking question we will only be interested in what the participant ranks as the most important (what they put as number 1). If this matches the advertisers'

FIRST intention then they will score $4\dots$ if it matches their SECOND ranked intention they will score 3- and so on. This matches the original paper.

5.4 Study 3 – Ethical approval letter



RESEARCH AND ENTERPRISE SERVICES

25th September 2014

Hayley Gilman School of Psychology Keele University

Dear Hayley,

Re: Implicit and explicit effects of advertising on adults' brand judgements

Thank you for submitting your application to amend study 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
Project Proposal	2	Sept 2014
Information Sheet	3	Sept 2014
ALS Scale	1	Sept 2014

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 stating ERP1 in the subject line of the email.

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 Stating ERP1 in the subject line of the e-mail.

Yours sincerely

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Dr Jackie Waterfield Chair – Ethical Review Panel

CC RI Manager Supervisor

5.5 Study 3 – Recruitment information for the Research Participation System

Letter of Invitation

Dear all,

I am a PhD student in the School of Psychology, and I would like to tell you a bit about my interests, and a study which I am currently looking for participants. As undergraduate students in the school, I would like to give you the opportunity to participate in my study, in exchange for 30 minutes Research Participation Time (RPT) towards your course.

In my research I want to get a better understanding of how individuals respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children are able to understand that the aim of ads is to persuade us to buy something and that by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. However, this is based on the assumption that ads aim to influence our conscious judgments, whereas many aspects of advertising are actually aimed at influencing how we feel about products. By associating products with things that we like or people that we admire, advertisers hope that positive affective responses to the paired item will transfer onto our response to the brand – a process called 'affect infusion'. Because our affective responses can occur below the level of conscious awareness, they may not be under conscious control. I am interested in whether we can detect evidence of affect infusion in responses to brands and the extent to which adults are able to guard against its influence in their conscious brand judgments. The proposed study looks at whether pairing a celebrity with a brand influences subsequent brand responses.

If you would like to participate in this study then please log in to the on-line RPT system and choose a time slot suitable for yourself. This study will last for no longer than 30 minutes, and 30 minutes of RPT will be credited towards your course, after completion of the study. You will be required to read an information sheet before commencing with the study, and you will have the opportunity to ask any questions you may have. If you are then happy to participate, I will ask that you sign a consent form. A letter of debrief will be given after the study has been completed. If you have a concern about any aspect of this study, or would like more information, you can email me at h.gilman@keele.ac.uk

Many thanks

Hayley Gilman

5.6 Study 3 – Information sheet



Information Sheet

Study Title: *Implicit and explicit effects of advertising on adults' brand judgments.*

Introduction

This research is being undertaken by Hayley Gilman – a PhD student in the School of Psychology. Research into individual's understanding of advertising has tended to focus upon the age at which they develop 'advertising literacy' skills (Young, 2003). The ability to recognise advertising and understand its persuasive and commercial intent (i.e. realising that ads aim to influence people to buy something) has been seen as providing children with protection against advertising's potential adverse effects. Because it has been assumed that such skills are based upon the ability to consciously process and reflect upon information about advertising, most of the work investigating the development of advertising literacy skills has examined children's explicit knowledge of advertising. Recently, however, researchers have begun to question whether the possession of advertising literacy skills, as demonstrated in their explicit judgments, actually does make individuals less susceptible to the effects of advertising. Heath and Feldwick (2007) have argued that much of advertising works by influencing consumers' emotional responses by encouraging them to acquire positive affective associations with brands at a non-conscious, 'implicit' level. Implicit knowledge is not available to conscious reflection, involves automatic processes, and may influence a person's behaviour without them being aware of it. Hayley's research is currently looking at whether adults show a disassociation across a range of advertising techniques, and will investigate how explicit and implicit attitudes influence their final brand judgments.

Aims of the Research

In our research we want to get a better understanding of how children and adults respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children understand that the aim of ads is to persuade us to buy something and that by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. However, this is based on the assumption that ads aim to influence our conscious judgments, whereas many aspects of advertising are actually aimed at influencing how we feel about products. The proposed study looks at whether pairing a celebrity with a brand influences subsequent brand responses.

Invitation

You are being invited to consider taking part in the research study *Implicit and explicit effects* of advertising on adults' brand judgments. This project is being undertaken by Hayley Gilman, supervised by Martin Rowley and Sue Sherman.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with the researcher if you wish. Ask if there is anything that is unclear or if you would like more information.

Why have I been chosen?

We have recruited a group of Psychology undergraduate students to participate in this project. As a Psychology student you were eligible to volunteer.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to sign two consent forms, one is for you to keep and the other is for my records. You are free to withdraw from this study at any time and without giving reasons.

What will happen if I take part?

Firstly you will be asked to complete a short questionnaire before completing a series of short computer tasks. During the computer tasks you will be shown a series of faces and brands, and for each one you will be asked to state how much you "like" the person or brand. The programme will randomly pair a previous face with a brand, where you will again be asked how much you like the brand. During stage 3 you will be asked to complete an Implicit Association Test (IAT) where you will be asked to identify certain stimuli as quickly and as accurately as possible. Such tests have been widely used in research with adults and children as young as 4 years old and in our pilot study participants enjoyed taking part in the task. Finally you will be asked to select the three brands that you liked the most (in rank order).

What are the benefits (if any) of taking part?

By participating in this study you will receive 30 minutes of Research Participation Time (RPT) towards your course credit.

What are the risks (if any) of taking part?

There are no known risks of taking part in this study.

How will information about me be used?

The computer programme will record all responses given, and will be used in my PhD thesis. It is also possible that that I will use the data collected in a research article to be submitted for publication in a journal. Anonymous numerical data from the questionnaires will be stored securely in an electronic database which will be made available for other researchers to use. This dataset will be collected for use in its own stand-alone study, although naturally the data may be used in future research studies, to act as a baseline measure. It is expected that this data will provide a means of comparing the responses of adults and children, although this will be in future studies.

Who will have access to information about me?

Only my two supervisors and I will have access to the data. Anonymity can be assured – all names will only be used on the consent forms, which will be locked in a secure filing cabinet, so that you cannot be identified in any way. Each participant will be given a participant number at the beginning of the study, so that you are able to withdraw your participation at any time. The computer programme will only have access to participant numbers, and no names will be inputted into the software. Only I will have access to the list of names corresponding to participant numbers. All of your responses will be treated as confidential, i.e. they will not be shared by the researchers with anyone outside of the group. We may use the collective dataset for publication purposes, but no individual data will be shared.

I do however have to work within the confines of current legislation over such matters as privacy and confidentiality, data protection and human rights and so offers of confidentiality may sometimes be overridden by law. For example in circumstances whereby I am made aware of future criminal activity, abuse either to yourself or another (i.e. child or sexual abuse) or suicidal tendencies I must pass this information to the relevant authorities.

Who is funding and organising the research?

The research is being funded by the Research Institute of Social Sciences at Keele University.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact *Hayley Gilman* on *h.gilman@keele.ac.uk*. Alternatively, if you do not wish to contact the researcher you may contact either of the PhD supervisors: *Martin Rowley* on *m.q.rowley@keele.ac.uk* or *Sue Sherman* on *s.m.sherman@keele.ac.uk*

If you remain unhappy about the research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please write to Nicola Leighton who is the University's contact for complaints regarding research at the following address:-

Nicola Leighton

Research Governance Officer

Research & Enterprise Services

Dorothy Hodgkin Building

Keele University

ST5 5BG

E-mail: n.leighton@uso.keele.ac.uk

Tel: 01782 733306

6.1 Study 4 & 5 – Scepticism scale

1. Most adverts tell the truth Strongly agree Agree Disagree Strongly disagree 2. Adverts aim to tell people about a brand or product Strongly agree Agree Disagree Strongly disagree 3. Adverts give accurate information Strongly disagree Strongly agree Agree Disagree 4. Adverts are usually truthful Strongly agree Disagree Strongly disagree Agree

Please circle one answer to identify how much you agree with each statement.

6. Adverts give a true picture of the product

Strongly agree

5. I can rely on the information given in adverts

Agree

Strongly agree Agree Disagree Strongly disagree

7. After viewing most adverts I feel I've been given the correct information

Disagree

Strongly disagree

Strongly agree Agree Disagree Strongly disagree

8. Most adverts tell people what they need to know about a brand or product

Strongly agree Agree Disagree Strongly disagree

6.2 Study 4 &5 – Stimuli used

Advertising Questionnaire

Thank you for taking part. You will firstly be asked some questions about your thoughts on advertising. You will then be presented with a series of brand images and for each one you will be asked how much you like the brand. You will also be asked to select the three brands that you liked the most. Finally you will be asked a few more questions about advertising.

If there are any questions that you do not wish to answer then please leave them blank. You are asked to give details of your gender and date of birth because I am looking at whether there are any differences between males and females, or different age groups. However all questionnaires will be anonymous so <u>please do not write your names on them</u>.

As a reminder, you are able to withdraw your participation up until the time you hand your questionnaire to the researcher – after this point it will be impossible to withdraw your questionnaire because we will not be able to identify your questionnaire from all the others. If you have any questions then please put up your hand, and if you decide not to complete the questionnaire, or that you don't want me to look at your answers, then please let me know before I leave the class today.

Gender:			
Date of Birth:			

If you are happy to continue then please turn over.

Please circle one answer to identify how much you agree with each statement.

1. Most adverts tell the truth

Strongly agree	Agree	Disagree	Strongly disagree		
2. Adverts aim to tell people about a brand or product					
Strongly agree	Agree	Disagree	Strongly disagree		
3. Adverts give acc	urate informatio	n			
Strongly agree	Agree	Disagree	Strongly disagree		
4. Adverts are usu	ally truthful				
Strongly agree	Agree	Disagree	Strongly disagree		
5. I can rely on the	information give	en in adverts			
Strongly agree	Agree	Disagree	Strongly disagree		
6. Adverts give a true picture of the product					
Strongly agree	Agree	Disagree	Strongly disagree		
7. After viewing m	ost adverts I feel	I've been given t	he correct information		
Strongly agree	Agree	Disagree	Strongly disagree		
8. Most adverts tell people what they need to know about a brand or product					
Strongly agree	Agree	Disagree	Strongly disagree		
		558 5			

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

You will now see a series of pictures of brands. Please circle one number to identify how much you like each brand.

brand logo, hrand loss brand logo, brar nd logo ο, **Celebrity face** brar nd presented logo ο, here brar nd logo 0

How much do you like the advertised brand?

^{*} For information - images of Declan Donnelly and Lacoste (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, brand logo

How much do you like the advertised brand?

^{*} For information - image of Nivea (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, hrand laga brand logo, brar nd logo ο, **Celebrity face** brar nd presented logo ο, here brar nd logo 0

How much do you like the advertised brand?

^{*} For information - images of Cheryl Cole and Mastercard (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, brand logo

How much do you like the advertised brand?

^{*} For information - image of Chanel (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, hrand laga brand logo, brar nd logo ο, **Celebrity face** brar nd presented logo ο, here brar nd logo 0

How much do you like the advertised brand?

^{*} For information - images of Harry Styles and Puma (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, brand logo

How much do you like the advertised brand?

^{*} For information - image of Motorola (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, hrand laga brand logo, brar nd logo ο, **Celebrity face** brar nd presented logo ο, here brar nd logo 0

How much do you like the advertised brand?

^{*} For information - images of Taylor Swift and Subway (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, brand logo

How much do you like the advertised brand?

^{*} For information - image of Aquafresh (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, hrand laga brand logo, brar nd logo ο, **Celebrity face** brar nd presented logo ο, here brar nd logo 0

How much do you like the advertised brand?

^{*} For information - images of Rupert Grint and Heinz (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, brand logo

How much do you like the advertised brand?

^{*} For information - image Adobe (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

Brand Advertisement Ranking

Please have a look at the advertised brands.			
(Brand logos presented here: Nivea, Mastercard, Subway, Puma, Chanel, Aquafresh, Heinz, Adobe, Lacoste, Motorola)			
Which of these shown above is your favourite brand?			
For what reason did you make your first choice?			
Which of these shown above is your second favourite brand?			
For what reason did you make your second choice?			
Which of these shown above is your third favourite brand?			
For what reason did you make your third choice?			

Please circle one answer to identify how much you agree with each statement.

1. Most adverts tell the truth				
Strongly agree	Agree	Disagree	Strongly disagree	
2. Adverts aim to t	ell people about	a brand or produc	t	
Strongly agree	Agree	Disagree	Strongly disagree	
3. Adverts give acc	urate informatio	n		
Strongly agree	Agree	Disagree	Strongly disagree	
4. Adverts are usua	ally truthful			
Strongly agree	Agree	Disagree	Strongly disagree	
5. I can rely on the	information give	n in adverts		
Strongly agree	Agree	Disagree	Strongly disagree	
6. Adverts give a true picture of the product				
Strongly agree	Agree	Disagree	Strongly disagree	
7. After viewing most adverts I feel I've been given the correct information				
Strongly agree	Agree	Disagree	Strongly disagree	
8. Most adverts tell people what they need to know about a brand or product				
Strongly agree	Agree	Disagree	Strongly disagree	

Thank you for completing this questionnaire. If you are finished please hand it to the researcher.

6.3 Study 4 – Ethical approval letter



Ref: ERP1249

16th September 2015

Hayley Gilman School of Psychology Dorothy Hodgkin Building Keele University

Dear Hayley

Re: Implicit and explicit effects of advertising on adults' brand judgements

Thank you for submitting your application to amend study. I am pleased to inform you that your application has been approved by the Ethical Review Panel. The following documents have been reviewed and approved by the Panel as follows:-

Document	Version	Date
Project Proposal	3	September 2015
Information Sheet	4	September 2015
Participant De-brief Sheet	2	September 2015

If the fieldwork goes beyond the 30th June 2016, you must notify the Ethical Review Panel via the ERP administrator at 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 stating ERP1 in the subject line of the e-mail.

Yours sincerely

Dr Andrew Rutherford

Vice Chair - Ethical Review Panel

CC RI Manager

Directorate of Engagement & Partnerships T: +44(0)1782 734467

Keele University, Staffordshire ST5 5BG, UK www.keele.ac.uk +44 (0)1782 732000

6.4 Study 4 – Recruitment information for the Research Participation System

Dear all,

I am a PhD student in the School of Psychology, and I would like to tell you a bit about my interests, and a study which I am currently looking for participants. As undergraduate students in the school, I would like to give you the opportunity to participate in my study, in exchange for 30 minutes Research Participation Time (RPT) towards your course.

In my research I want to get a better understanding of how individuals respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children are able to understand that the aim of ads is to persuade us to buy something and that by this age their thinking skills have developed enough to provide them with protection from any unwanted influence.

If you would like to participate in this study then please log in to the on-line RPT system and choose a time slot suitable for yourself. This study will last for no longer than 30 minutes, and 30 minutes of RPT will be credited towards your course, after completion of the study. You will be required to read an information sheet before commencing with the study, and you will have the opportunity to ask any questions you may have. If you are then happy to participate, I will ask that you sign a consent form. A letter of debrief will be given after the study has been completed. If you have a concern about any aspect of this study, or would like more information, you can email me at h.gilman@keele.ac.uk

Many thanks

Hayley Gilman

6.5 Study 4 – Information sheet



Information Sheet

Study Title: The effects of advertising on adults' explicit brand judgments.

Introduction

This research is being undertaken by Hayley Gilman – a PhD student in the School of Psychology. Research into individual's understanding of advertising has tended to focus upon the age at which they develop 'advertising literacy' skills (Young, 2003). The ability to recognise advertising and understand its persuasive and commercial intent (i.e. realising that ads aim to influence people to buy something) has been seen as providing children with protection against advertising's potential adverse effects. Because it has been assumed that such skills are based upon the ability to consciously process and reflect upon information about advertising, most of the work investigating the development of advertising literacy skills has examined children's explicit knowledge of advertising. Recently, however, researchers have begun to question whether the possession of advertising literacy skills, as demonstrated in their explicit judgments, actually does make individuals less susceptible to the effects of advertising. Heath and Feldwick (2007) have argued that much of advertising works by influencing consumers' emotional responses by encouraging them to acquire positive affective associations with brands at a non-conscious, 'implicit' level. *Implicit* knowledge is not available to conscious reflection, involves automatic processes, and may influence a person's behaviour without them being aware of it. Hayley's research is currently looking at whether adults show a disassociation across a range of advertising techniques, and will investigate how explicit attitudes influence their final brand judgments.

Aims of the Research

In our research we want to get a better understanding of how children and adults respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children understand that the aim of ads is to persuade us to buy something and that by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. However, this is based on the assumption that ads aim to influence our conscious judgments, whereas many aspects of advertising are actually aimed at influencing how we feel about products. The proposed

study looks at whether pairing a celebrity with a brand influences subsequent brand responses.

Invitation

You are being invited to consider taking part in the research study *The effects of advertising on adults' explicit brand judgments*. This project is being undertaken by *Hayley Gilman*, supervised by *Martin Rowley* and *Sue Sherman*.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with the researcher if you wish. Ask if there is anything that is unclear or if you would like more information.

Why have I been chosen?

We have recruited a group of Psychology undergraduate students to participate in this project. As a Psychology student you were eligible to volunteer.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to sign two consent forms, one is for you to keep and the other is for my records. You are free to withdraw from this study at any time and without giving reasons.

What will happen if I take part?

Firstly you will be presented with a series of brand images and for each one you will be asked how much you like the brand. You will then be asked to complete a short online questionnaire before being shown a PowerPoint presentation of brands. Finally you will be asked to select the three brands that you liked the most (in rank order).

What are the benefits (if any) of taking part?

By participating in this study you will receive 30 minutes of Research Participation Time (RPT) towards your course credit.

What are the risks (if any) of taking part?

There are no known risks of taking part in this study.

How will information about me be used?

The computer programme will record all responses given, and will be used in my PhD thesis. It is also possible that that I will use the data collected in a research article to be submitted for publication in a journal. Anonymous numerical data from the questionnaires will be stored securely in an electronic database which will be made available for other researchers to use. This dataset will be collected for use in its own stand-alone study, although naturally the data may be used in future research studies, to act as a baseline measure. It is expected that this data will provide a means of comparing the responses of adults and children, although this will be in future studies.

Who will have access to information about me?

Only my two supervisors and I will have access to the data. Anonymity can be assured – all names will only be used on the consent forms, which will be locked in a secure filing cabinet, so that you cannot be identified in any way. Each participant will be given a participant number at the beginning of the study, so that you are able to withdraw your participation at any time. The computer programme will only have access to participant numbers, and no names will be inputted into the software. Only I will have access to the list of names corresponding to participant numbers. All of your responses will be treated as confidential, i.e. they will not be shared by the researchers with anyone outside of the group. We may use the collective dataset for publication purposes, but no individual data will be shared.

I do however have to work within the confines of current legislation over such matters as privacy and confidentiality, data protection and human rights and so offers of confidentiality may sometimes be overridden by law. For example in circumstances whereby I am made aware of future criminal activity, abuse either to yourself or another (i.e. child or sexual abuse) or suicidal tendencies I must pass this information to the relevant authorities.

Who is funding and organising the research?

The research is being funded by the Research Institute of Social Sciences at Keele University.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact *Hayley Gilman* on *h.gilman@keele.ac.uk*. Alternatively, if you do not wish to contact the researcher you may contact either of the PhD supervisors: *Martin Rowley* on <u>m.g.rowley@keele.ac.uk</u> or *Sue Sherman* on <u>s.m.sherman@keele.ac.uk</u>

If you remain unhappy about the research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please write to Nicola Leighton who is the University's contact for complaints regarding research at the following address:-

Nicola Leighton

Research Governance Officer

Research & Enterprise Services

Dorothy Hodgkin Building

Keele University

ST5 5BG

 $E\text{-}mail: \underline{n.leighton@uso.keele.ac.uk}$

Tel: 01782 733306

6.6 Study 4 – Debrief form

The effects of advertising on adults' explicit responses to brands.

Research into the understanding of advertising has tended to focus upon the age at which children develop 'advertising literacy' skills (Young, 2003). The ability to recognise advertising and understand its persuasive and commercial intent (i.e. realising that ads aim to influence people to buy something) has been seen as providing children with protection against advertising's potential adverse effects. Because it has been assumed that such skills are based upon the ability to consciously process and reflect upon information about advertising, most of the work investigating the development of advertising literacy skills has examined an individual's explicit knowledge of advertising. Explicit knowledge is knowledge that is available to conscious reflection and therefore involves slow, effortful cognitive processes. Because it is possible, at least potentially, to articulate explicit knowledge researchers have typically used techniques such as self-report or rating scales to examine its development. There is still some dispute about exactly when children's advertising literacy skills emerge but recent work has suggested that children begin to demonstrate explicit understanding of the selling intent of advertising (around 8-9 years of age) before understanding its persuasive nature (10-12 years), and that understanding may emerge earlier for some advertising techniques than for others (Rozendaal, Buijzen & Valkenburg, 2010; 2011). Due to the ambiguity of the age at which children develop 'advertising literacy' it is important for us to know how much 'literate' adults are when it comes to advertising.

Recently, however, researchers have begun to question whether the possession of advertising literacy skills, as demonstrated in their explicit judgments, actually does make individuals less susceptible to the effects of advertising. Heath and Feldwick (2007) have argued that much of advertising works by influencing consumers' emotional responses by encouraging them to acquire positive affective associations with brands at a non-conscious, 'implicit' level. Implicit knowledge is not available to conscious reflection, involves automatic processes, and may influence a person's behaviour without them being aware of it. Nairn and Fine (2008) identify a number of 'stealth marketing' techniques which may operate in this manner (e.g. celebrity endorsement, product placement) and claim that both children and adults may find it difficult to guard against their implicit effects. In line with this, Forehand and Perkins (2005) found that undergraduates who identified the celebrity in an advertising voiceover were alerted to the advertiser's intention to influence their attitude to the brand. Consequently, their positive attitude towards the celebrity did not transfer to their *explicit* brand judgment. Despite this, their *implicit* affective response to the brand still changed in line with the advertiser's intention (i.e. a positive relationship was seen between celebrity attitude and implicit brand response).

In this research, I looked at whether adults show a similar disassociation across a range of advertising techniques and will investigate how explicit attitudes influence their final brand judgments. This study examined whether celebrities advertising brands could influence explicit brand judgments.

I would like to take this opportunity to thank you for participating in my PhD research. May I remind you that you are able to withdraw your data at any time. If you have any questions about my research, or would like any further information then please don't hesitate to contact me on h.gilman@keele.ac.uk

Many thanks once again,

Hayley

References

Forehand, M. R. and Perkins, A. (2005). Implicit assimilation and explicit contrast: A set/reset model of response to celebrity voice-overs. *Journal of Consumer Research*, *32*, 435-441.

Heath, R. & Feldwick, P. (2007). Fifty years using the wrong model of advertising. *International Journal of Market Research*, 50, 29-59.

Nairn, A. and Fine, C. (2008). Who's messing with my mind? The implications of dual-process models for the ethics of advertising to children. *International Journal of Advertising*, 27, 447-470

Rozendaal, E., Buijzen, M., & Valkenburg, P. (2010). Comparing Children's and Adults' Cognitive Advertising Competences in the Netherlands. *Journal of Children and Media*, 4, 77-89

Rozendaal, E., Buijzen, M., & Valkenburg, P. (2011). <u>Children's understanding of</u> advertisers' persuasive tactics. *International Journal of Advertising*, *30*, 329-350

Young, B. (2003). Does food advertising influence children's food choices? A critical review of some of the recent literature. *International Journal of Advertising*, 22, 441-459.

7.1 Study 5 – Ethical approval letter



Ref: ERP1274

4th May 2016

Hayley Gilman School of Psychology Keele University

Dear Hayley,

Re: Implicit and explicit effects of advertising on children's brand judgments

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
Information letter for Parents/Guardians	1	April 2016
Invitation Letter to Head Teacher	3	April 2016
Verbal Script	2	April 2016
Questionnaire	1	March 2016
Verbal Debrief	1	March 2016

If the fieldwork goes beyond the date stated in your application (30th November 2016), you must notify the Ethical Review Panel via the ERP administrator at research.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/.

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7.2 Study 5 – Letter of invitation sent to local schools



Hayley Gilman

DH0.67 — Dorothy Hodgkin Building

Keele University

Keele

Newcastle-under-Lyme

ST5 5BG

Dear insert name of headteacher,

My name is Hayley Gilman and I am a part-time PhD student of Dr Martin Rowley in the School of Psychology at Keele University. In my research I aim to get a better understanding of how children respond to advertising and how advertising influences their brand judgments. Past research in this area has suggested that by the age of 12 years most children are able to protect themselves from any unwanted influence of ads. This is based upon the assumption that by this age children have developed advertising literacy skills which allow them to recognize ads and provide them with an understanding that the aim of ads is to influence or judgments and persuade us to buy something. Despite these assumptions, however, remarkably little research which has tested how children's knowledge and skepticism about ads impacts on their responses to brands and products.

I would like to request your consent for me to come into your school and talk to children about my research and to give them the opportunity to complete an advertising questionnaire. If you agree I would talk to all children aged 9- years, 11- years, 13- years and 15- years (delete ages as appropriate) about my research and, should they wish to participate, present them with a short questionnaire which assesses their skepticism about ads and how they respond to brands presented with and without images of popular celebrities. I aim to examine whether celebrity influence on brand judgments varies in participants with different levels of ad skepticism and in different age groups. All the materials I aim to present have been used before with children as young as 7 years old and have been approved by the Ethics Review Panel at Keele University. Whilst there is no ethical requirement for parents to give consent for their child to complete my questionnaire, I would like to make parents/guardians aware of my presence at your school and the research which is taking place. Therefore if you do give me your consent to talk to children at your school about my research, I would like to discuss with you how I could inform parents/guardians that this research is taking place, for example whether it would be possible for you to notify parents of my research through your website or via newsletters that are sent home.

Firstly participants will be asked to complete a short questionnaire that measures their advertising literacy competence. Children will then be presented with a series of brand logos either independently or accompanied by a celebrity and for each one they will be asked how much they like the brand. This will enable us to gather their brand preference scores. A final brand choice task will be given in order to look at the relationship between advertising literacy, reported preference for brands and final brand choice. This will require participants

to select the three brands (in rank order) that they have the most preference for. I would come into the class to explain the questionnaire and administration of the questionnaire should take up no more than 20 minutes of class time. If any child chooses not to participate in this research then they will be given a piece of paper and asked to design a poster ad to advertise a new brand of toothpaste. Alternatively I would be happy for an activity to be given by the relevant class teachers. If you would be happy for your pupils to take part in my questionnaire or if you would like any further information then please don't hesitate to contact me, Hayley Gilman on h.gilman@keele.ac.uk. I would be very happy to give you more information on the study and provide you with a copy of the questionnaire for you to look through.

Regards

Hayley Gilman

7.3 Study 5 – Letter to parents



Hayley Gilman DH0.67 — Dorothy Hodgkin Building Keele University Keele Newcastle-under-Lyme

ST5 5BG

Dear Parent / Guardian,

My name is Hayley Gilman and I am a part-time PhD student of Dr Martin Rowley in the School of Psychology at Keele University. I am writing to tell you about research that I am currently conducting.

In my research I aim to get a better understanding of how children respond to advertising and how advertising influences their brand judgments. Past research in this area has suggested that by the age of 12 years most children are able to protect themselves from any unwanted influence of ads. This is based upon the assumption that by this age children have developed advertising literacy skills which allow them to recognize ads and provide them with an understanding that the aim of ads is to influence or judgments and persuade us to buy something. Despite these assumptions, however, remarkably little research which has tested how children's knowledge and skepticism about ads impacts on their responses to brands and products.

Children aged 9- years, 11- years, 13- years and 15- years are being asked to take part. Taking part in this study will involve children being presented with a short questionnaire which assesses their skepticism about ads and how they respond to brands presented with and without images of popular celebrities. I aim to examine whether celebrity influence on brand judgments varies in participants with different levels of ad skepticism and in different age groups. I will be present in the class to explain the questionnaire and administration of the questionnaire should take up no more than 20 minutes of class time. If any child chooses not to participate in this research then they will be given a piece of paper and asked to design a poster ad to advertise a new brand of toothpaste. All the materials presented have been used before with children as young as 7 years old and have been approved by the Ethics Review Panel at Keele University.

Before the start of the questionnaire it will be made very clear to each child what is going to happen and that they do not have to take part if they don't want to and that they can opt out at any time without having to give a reason. The children's responses will be treated in confidence. Anonymous numerical data from the questionnaires will be stored securely in an electronic database which will be made available for other researchers to use.

If you have any	queries regarding thi	s research plea	se do not hesitate	to contact me: l	Hayley
Gilman Email:	h.gilman@keele.ac.u	<u>ık</u>			

Yours faithfully,

Hayley Gilman

7.4 Study 5 – Verbal debrief given to children

Verbal debrief

Thank you for completing the questionnaire. In my research I want to get a better understanding of how people respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children understand the aim of ads is to persuade us to buy something and by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. In my research I will be asking people aged between 9-15 years to complete this questionnaire so that I can get a better understanding of the age at which people fully understand advertising and the effect that it may have on us. Thank you again for taking the time to complete this questionnaire.

9.1 Study 6 – Accuracy-based scepticism scale

1. Most adverts tel	l the truth		
Strongly agree	Agree	Disagree	Strongly disagree
2. Adverts aim to t		_	
Strongly agree	Agree	Disagree	Strongly disagree
3. Adverts give acc	curate informatio	on	
Strongly agree	Agree	Disagree	Strongly disagree
4. I can rely on the	information giv	en in adverts	
Strongly agree	Agree	Disagree	Strongly disagree
5. After viewing m	ost adverts I feel	I've been given tl	ne correct information
Strongly agree	Agree	Disagree	Strongly disagree
6. Most adverts tel	l people what the	ey need to know a	bout a brand or product
Strongly agree	Agree	Disagree	Strongly disagree

9.2 Study 6 – Affect-based scepticism scale

1. I like adverts			
Strongly agree	Agree	Disagree	Strongly disagree
2. I think adverts a	are nice		
Strongly agree	Agree	Disagree	Strongly disagree
3. I think adverts a	are funny		
Strongly agree	Agree	Disagree	Strongly disagree
4. I think adverts a	are boring		
Strongly agree	Agree	Disagree	Strongly disagree
5. I think adverts a	are stupid		
Strongly agree	Agree	Disagree	Strongly disagree

9.3 Study 6 – Stimuli used

Week 1 -

Advertising Questionnaire

Thank you for taking part. In this questionnaire you will be asked some questions about your thoughts on advertising.

If there are any questions that you do not wish to answer then please leave them blank. You are asked to give details of your gender and date of birth because I am looking at whether there are any differences between males and females, or different age groups. You are also asked to give your name so that I can match your answers with answers you give in other weeks.

As a reminder, you are able to withdraw your participation any time within the next couple of weeks. If you have any questions then please put up your hand, and if you decide not to complete the questionnaire, or that you don't want me to look at your answers, then please let me know before I leave the class today.

Name:
Gender:
Date of Birth:

7. Most adver	ts tell the truth		
Strongly agree	Agree	Disagree	Strongly disagree
8. Adverts ain	a to tell people al	bout a brand or pr	oduct
Strongly agree	Agree	Disagree	Strongly disagree
9. Adverts giv	e accurate inforr	nation	
Strongly agree	Agree	Disagree	Strongly disagree
10. I can rely o	n the information	n given in adverts	
Strongly agree	Agree	Disagree	Strongly disagree
11. After viewi	ng most adverts	I feel I've been give	en the correct information
Strongly agree	Agree	Disagree	Strongly disagree
12. Most adver	ts tell people wha	at they need to kno	w about a brand or product
Strongly agree	Agree	Disagree	Strongly disagree

13. I like adverts

Strongly agree

Strongly agree	Agree	Disagree	Strongly disagree
14. I think adverts a	are nice		
Strongly agree	Agree	Disagree	Strongly disagree
15. I think adverts a	are funny		
Strongly agree	Agree	Disagree	Strongly disagree
16. I think adverts a	are boring		
Strongly agree	Agree	Disagree	Strongly disagree
17. I think adverts a	are stupid		

Disagree

Agree

Strongly disagree

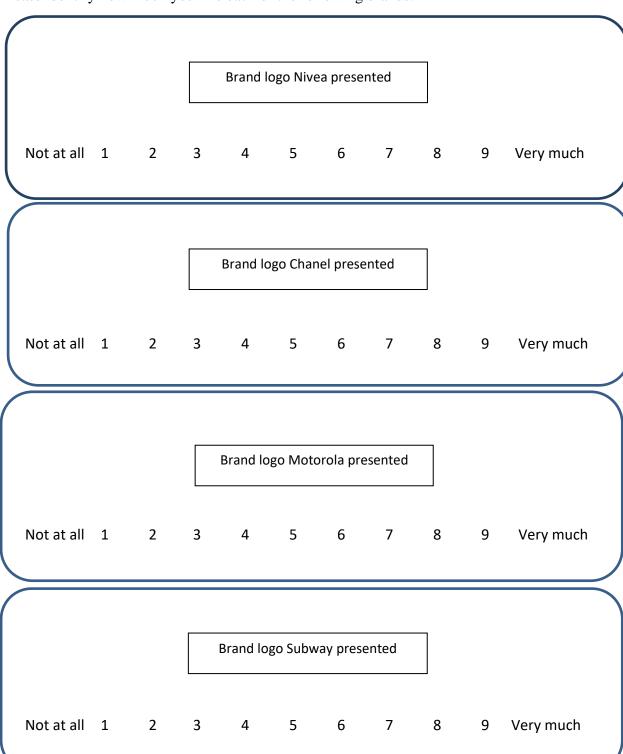
Celebrity rating

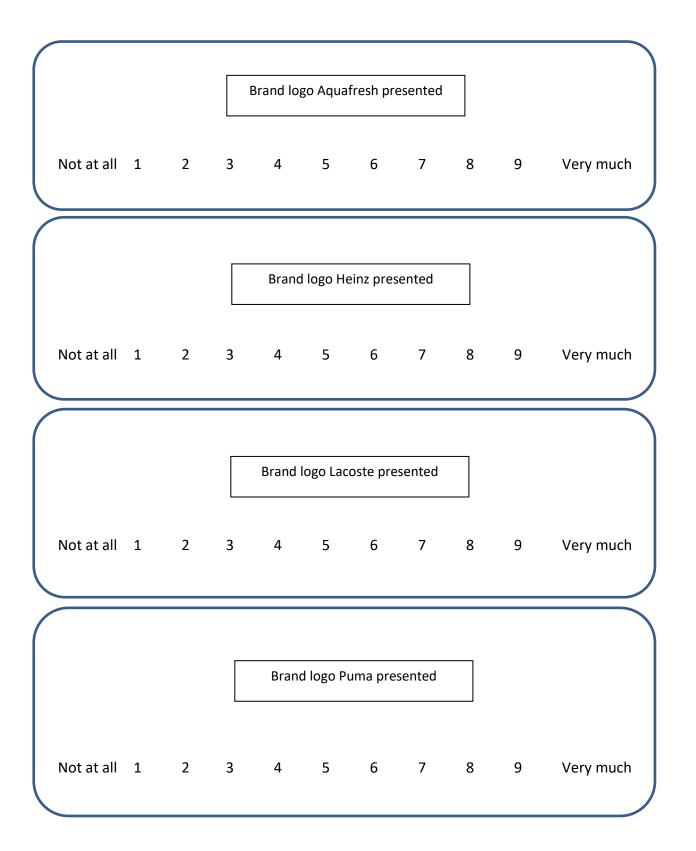
1. How n	nuch do	you l	ike (C e	elebrity	A)?					
Not at all	1	2	3	4	5	6	7	8	9	Very much
2. How n	nuch de	o you l	ike (Ce	elebrity	B)?					
Not at all	1	2	3	4	5	6	7	8	9	Very much
3. How n	nuch de	o you l	ike (C e	elebrity	C)?					
Not at all	1	2	3	4	5	6	7	8	9	Very much
4. How n	nuch de	o you l	ike (Ce	elebrity	D)?					
Not at all	1	2	3	4	5	6	7	8	9	Very much

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

Brand rating

Please identify how much you like each of the following brands:





Thank you for completing this questionnaire. If you are finished, please hand it to the researcher.

Week 2 -

Name:

Advertising Questionnaire

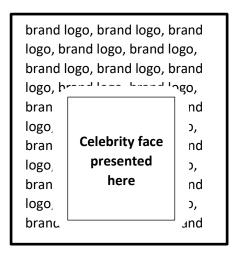
Thank you for completing my questionnaire last week. Today I have some computer based tasks for you to complete, if you would like to take part. You will firstly be shown some brands and you need to decide how much you like or dislike them. You will then be presented with a series of brand images and for each one you will be asked how much you like the brand. You will also be asked to select the three brands that you liked the most. Finally you will be asked a few more questions about advertising. You will then be asked to participate in a computer based task. As a reminder, you are able to withdraw your participation at any time within the next week. If you have any questions then please put up your hand, and if you decide not to complete the questionnaire, or that you don't want me to look at your answers, then please let me know before I leave the class today.

If you're happy to continue then please start filling in the questionnaire. If you do not want to fill in the questionnaire then let me know and I'll take you back to the classroom.

Gender:
Date of Birth:
Participant number (for IAT) -

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

You will see a series of pictures of brands, for each one please look at it and answer the questions.



* For information - images Ant McPartlin and Aquafresh (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

How much do you like the advertised brand?

Not at all	1	2	3	4	5	6	7	8	9	Very much

I like this advert

Strongly agree	A	D':	C4
Strongty agree	Agree	Disagree	Strongly disagree
Buongry agree	Agicc	Disagice	Subligit disagree

I think this advert is nice

Strongly agree Agree Disagree Strongly disagree

I think this advert is funny

Strongly agree Agree Disagree Strongly disagree

I think this advert is boring

Strongly agree Agree Disagree Strongly disagree

I think this advert is stupid

Strongly agree Agree Disagree Strongly disagree

brand logo, brand

How much do you like the advertised brand? 5 3 7 9 Not at all 6 Very much I like this advert Strongly agree Agree Disagree Strongly disagree I think this advert is nice Disagree Strongly disagree Strongly agree Agree I think this advert is funny Disagree Strongly disagree Strongly agree Agree I think this advert is boring Strongly agree Disagree Strongly disagree Agree I think this advert is stupid Disagree Strongly disagree Strongly agree Agree

^{*} For information - image Chanel (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, hrandland handlago, bran nd logo, ٥, **Celebrity face** bran nd presented logo ٥, here bran nd logo, ٥, branc and

How much do you like the advertised brand?

Not at all 1 2 3 4 5 6 7 8 9 Very much

I like this advert

Strongly agree Agree Disagree Strongly disagree

I think this advert is nice

Strongly agree Agree Disagree Strongly disagree

I think this advert is funny

Strongly agree Agree Disagree Strongly disagree

I think this advert is boring

Strongly agree Agree Disagree Strongly disagree

I think this advert is stupid

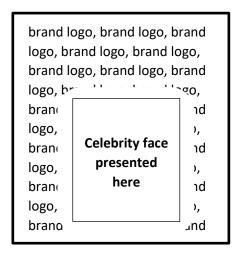
Strongly agree Agree Disagree Strongly disagree

^{*} For information - images Jade Thirlwall and Lacoste (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, brand

How much do you like the advertised brand? Not at all 1 3 5 6 7 Very much I like this advert Disagree Strongly disagree Strongly agree Agree I think this advert is nice Strongly agree Disagree Strongly disagree Agree I think this advert is funny Disagree Strongly disagree Strongly agree Agree I think this advert is boring Strongly agree Agree Disagree Strongly disagree I think this advert is stupid Strongly agree Disagree Strongly disagree Agree

^{*} For information - image Nivea (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).



^{*} For information - images Ariana Grande and Subway (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

How much do you like the advertised brand?

Not at all 1 2 3 4 5 6 7 8 9 Very much

I like this advert

Strongly agree Agree Disagree Strongly disagree

I think this advert is nice

Strongly agree Agree Disagree Strongly disagree

I think this advert is funny

Strongly agree Agree Disagree Strongly disagree

I think this advert is boring

Strongly agree Agree Disagree Strongly disagree

I think this advert is stupid

Strongly agree Agree Disagree Strongly disagree

brand logo, brand

How much do you like the advertised brand? 5 Not at all Very much I like this advert Strongly agree Disagree Strongly disagree Agree I think this advert is nice Strongly disagree Strongly agree Agree Disagree I think this advert is funny Disagree Strongly disagree Strongly agree Agree I think this advert is boring Strongly agree Disagree Strongly disagree Agree I think this advert is stupid

Disagree

Strongly agree

Agree

Strongly disagree

^{*} For information - image Heinz (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, hrandland handlago, bran nd logo, ٥, **Celebrity face** bran nd presented logo ٥, here bran nd logo, ٥, branc and

How much do you like the advertised brand?

Not at all 1 2 3 4 5 6 7 8 9 Very much

I like this advert

Strongly agree Agree Disagree Strongly disagree

I think this advert is nice

Strongly agree Agree Disagree Strongly disagree

I think this advert is funny

Strongly agree Agree Disagree Strongly disagree

I think this advert is boring

Strongly agree Agree Disagree Strongly disagree

I think this advert is stupid

Strongly agree Agree Disagree Strongly disagree

^{*} For information - images Declan Donnely and Puma (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

brand logo, brand

How much do you like the advertised brand? Not at all 3 5 6 7 Very much 1 I like this advert Disagree Strongly disagree Strongly agree Agree I think this advert is nice Strongly agree Disagree Strongly disagree Agree I think this advert is funny Disagree Strongly disagree Strongly agree Agree I think this advert is boring Strongly agree Agree Disagree Strongly disagree I think this advert is stupid Strongly agree Disagree Strongly disagree Agree

^{*} For information - image Motorola (logo) can be seen here in appendix of printed thesis (as pictorial example of study setup).

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

Brand Advertisement Ranking

Please have a look at the advertised brands.
(Brand logos presented here: Nivea, Mastercard, Subway, Puma, Chanel, Aquafresh, Heinz, Adobe, Lacoste, Motorola)
Which of these shown above is your favourite brand? For what reason did you make your first choice?
Which of these shown above is your second favourite brand?
For what reason did you make your second choice?
Which of these shown above is your third favourite brand?
For what reason did you make your third choice?

Week 3 -

Advertising Questionnaire

Thank you for taking part. In this questionnaire you will be asked some questions about your thoughts on advertising.

If there are any questions that you do not wish to answer then please leave them blank. You are asked to give details of your gender and date of birth because I am looking at whether there are any differences between males and females, or different age groups. You are also asked to give your name so that I can match your answers with answers you give in other weeks.

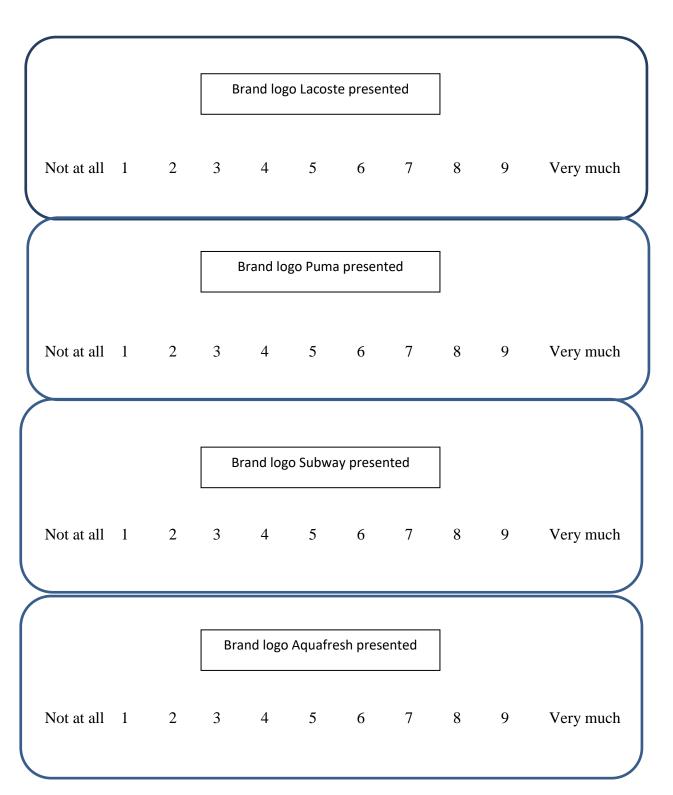
As a reminder, you are able to withdraw any of your previous participation before I leave today. After today your questionnaires will be made anonymous and so your responses will not be able to be identified. If you have any questions then please put up your hand, and if you decide not to complete the questionnaire, or that you don't want me to look at your answers, then please let me know before I leave the class today.

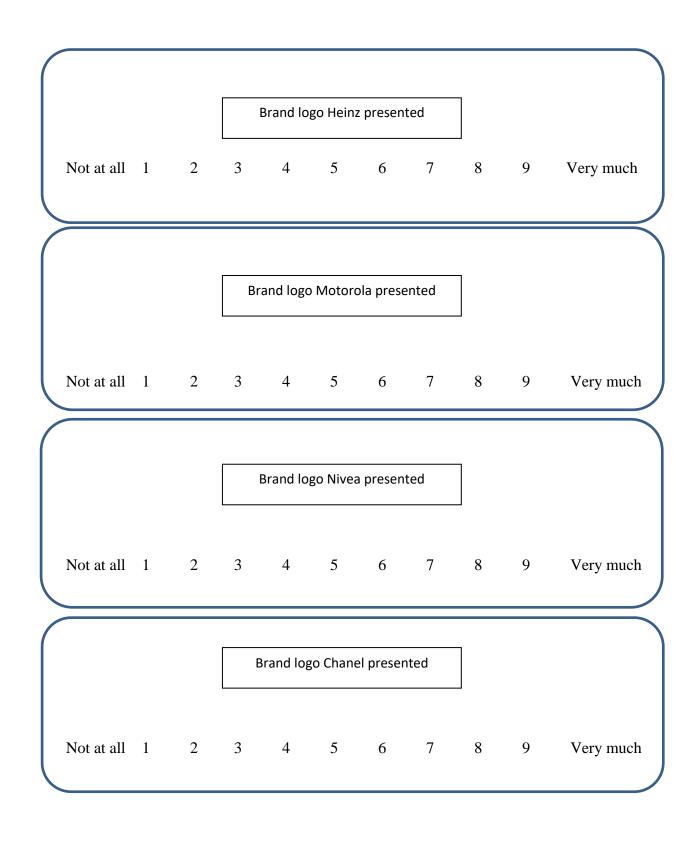
Name:
Gender:
Date of Birth:

*please note, images have been edited solely to ensure compliance with copyright legislation. The full, final, examined and awarded version of the thesis is available for consultation in hard copy via the University Library.

Brand rating

Please identify how much you like each of the following brands:





1. Most adver	ets tell the truth		
Strongly agree	Agree	Disagree	Strongly disagree
2. Adverts air	n to tell people al	oout a brand or pr	oduct
Strongly agree	Agree	Disagree	Strongly disagree
3. Adverts giv	ve accurate inforr	nation	
Strongly agree	Agree	Disagree	Strongly disagree
4. I can rely o	on the information	n given in adverts	
Strongly agree	Agree	Disagree	Strongly disagree
5. After viewi	ing most adverts	feel I've been give	en the correct information
Strongly agree	Agree	Disagree	Strongly disagree
6. Most adver	rts tell people wha	nt they need to kno	w about a brand or product
Strongly agree	Agree	Disagree	Strongly disagree
7. I like adve	rts		
Strongly agree	Agree	Disagree	Strongly disagree

Ω	-	41 . 1	1 4		•
8.		think	adverts	are	nice
v.	_		auverts	arc	mee

Strongly agree	Agree	Disagree	Strongly disagree
9. I think adve	erts are funny		
Strongly agree	Agree	Disagree	Strongly disagree
10. I think adve	erts are boring		
Strongly agree	Agree	Disagree	Strongly disagree
11. I think adve	erts are stupid		
Strongly agree	Agree	Disagree	Strongly disagree

Thank you for completing this questionnaire. If you are finished please hand it to the researcher.

9.4 Study 6 – Ethical approval level



Ref: ERP1328

27th April 2017

Hayley Gilman School of Psychology Keele University

Dear Hayley,

Re: Implicit and explicit effects of advertising on children's brand judgements

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
Letter to Head Teacher	1	March 2017
Letter to Parent/Guardian	2	April 2017
Verbal Script	2	April 2017
Verbal Debrief	1	March 2017
Advertising Questionnaire Week 1	2	April 2017
Advertising Questionnaire Week 2	1	March 2017
Advertising Questionnaire Week 3	2	April 2017

If the fieldwork goes beyond the date stated in your application, 30th September 2017, or there are any other amendments to your study you must submit an 'application to amend study' form to the ERP administrator at research.governance@keele.ac.uk stating ERP1 in the subject line of the e-mail. This form is available via http://www.keele.ac.uk/researchsupport/researchethics/

Directorate of Engagement & Partnerships T: +44(0)1782 734467

Keele University, Staffordshire ST5 5BG, UK www.keele.ac.uk +44 (0)1782 732000

9.5 Study 6 – Letter sent to local schools



Hayley Gilman

DH0.67 – Dorothy Hodgkin Building

Keele University

Keele

Newcastle-under-Lyme

ST5.5BG

Dear insert name of headteacher,

I am a PhD student in the School of Psychology at Keele University. In my research I aim to get a better understanding of how children respond to advertising and how advertising influences their brand judgments. Past research in this area has suggested that by the age of 12 years most children are able to protect themselves from any unwanted influence of ads. This is based upon the assumption that by this age children have developed advertising literacy skills which allow them to recognize ads and provide them with an understanding that the aim of ads is to influence or judgments and persuade us to buy something. Despite these assumptions, however, remarkably little research has tested how children's knowledge and scepticism about ads impacts on their responses to brands and products.

I would like to request your consent for children at your school to participate in my research. If you agree, all year XX and year XX children would be given the opportunity to participate in a study, over 3 consecutive weeks. In weeks 1 and 3 I would present a short, printed questionnaire to the whole class which assesses children's scepticism towards advertising in general. This part of the study would take no longer than 10 minutes of class time, and is often completed in a registration or PSHE session. In week 2 children would one-by-one participate in a computer based task which would measure the explicit (conscious) and implicit (automatic) responses to specific brands paired with celebrities. This part of the task takes, on average, 15 minutes per child, and I could arrange to bring a team of researchers with me so that multiple testing is possible. I aim to examine whether celebrity influence on brand judgments varies in participants with different levels of ad scepticism and in different age groups. All the materials I present have been used before with children as young as 7 years old and have been approved by the Ethics Review Panel at Keele University. As a way of thank you there is a £50 voucher available for participating schools.

If you would be happy for your pupils to take part in my questionnaire to students or if you would like any further information then please don't hesitate to contact me, Hayley Gilman on h.gilman@keele.ac.uk. I would be very happy to give you more information on the study and provide you with a copy of the questionnaire for you to look through.

Regards

Hayley Gilman

9.6 Study 6 – Parental opt out letter



Hayley Gilman

DH0.67 – Dorothy Hodgkin Building

Keele University

Keele

Newcastle-under-Lyme

ST5 5BG

Dear Parent / Guardian,

My name is Hayley Gilman and I am a part-time PhD student of Dr Martin Rowley in the School of Psychology at Keele University. I am writing to tell you about research that we are carrying out in schools. Details of the research are given below. **If, after reading this information, you decide that you do NOT wish your child to take part in the research then please complete the reply slip and return it to the school by (insert date)**. If you do not complete the reply slip I will assume that you are willing for your child to participate in the research. If you do not complete the reply slip but subsequently decide you do not wish your child to take part in the study please contact Hayley Gilman by email (see below) or contact (name of headteacher) at (headteachers contact details). After all the tasks have been completed the data will be anonymised and therefore it will not be possible to withdraw your child.

Children aged 8- years, 10- years, 12- years and 14-years are being asked to take part and I would like to request your consent for your child to participate in this research. Taking part in this study will involve children being presented with a short questionnaire distributed in class on two separate occasions (taking approximately 10 minutes of class time) and some individual computer based tasks (lasting approximately 15 minutes) which assesses their scepticism about ads and how they respond to brands presented with and without images of popular celebrities. I aim to examine whether celebrity influence on brand judgments varies in participants with different levels of ad scepticism and in different age groups. All the materials I aim to present have been used before with children as young as 7 years old and have been approved by the Ethics Review Panel at Keele University.

Before the start of the tasks it will be made very clear to each child what is going to happen and that they do not have to take part if they don't want to and that they can opt out at any time without having to give a reason. The children's responses will be treated in confidence. Anonymous numerical data from the questionnaires will be stored securely in an electronic database which will be made available for other researchers to use.

If you have a concern about any aspect of this study, you should speak to Hayley Gilman (details below). You can also contact either of Hayley's supervisors: Martin Rowley on m.q.rowley@keele.ac.uk or Sue Sherman on s.m.sherman@keele.ac.uk. If you remain unhappy about the research and/or wish to raise a complaint about any aspect of the way that you have been approached or treated during the course of the study please contact: Nicola

Leighton, Research Governance Officer, Research & Enterprise Services, Dorothy Hodgkin Building, Keele University. ST5 5BG; Tel: 01782 733306.

If you have any queries regarding this research please do not hesitate to contact me: Hayley Gilman Email: h.gilman1@keele.ac.uk

Yours faithfully,		
Hayley Gilman		
REPLY SLIP:		
Please return to (insert school name)		
I DO NOT give permission for (child's name)		to take part.
Child's year group: Child's Class:		
PRINT NAME:		
SIGNED:	DATE	

9.7 Study 6 – Verbal debrief given to children

Week 1

Thank you for completing the questionnaire. In my research I want to get a better understanding of how people respond to advertising. Next week I will be back to ask you to take part in some computer tasks, so I will give you more information about my study then.

Week 2

Thank you for taking part in these tasks. In my research I want to get a better understanding of how people respond to advertising and how advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children understand the aim of ads is to persuade us to buy something and by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. In my research I will be asking people aged between 9-15 years to complete this questionnaire so that I can get a better understanding of the age at which people fully understand advertising and the effect that it may have on us. Thank you again for taking the time to help me out with my research.

Week 3

Thank you for taking the time to participate in my study over the last few weeks. In my research I want to get a better understanding of how people respond to advertising and how celebrity advertising influences their brand judgments. Past research in this area suggests that by the age of 12 years most children understand the aim of ads is to persuade us to buy something and by this age their thinking skills have developed enough to provide them with protection from any unwanted influence. In my research I will be asking people aged between 9-15 years to complete this questionnaire so that I can get a better understanding of the age at which people fully understand advertising and the effect that it may have on us. Thank you again for taking the time to help me out with my research.

11.1 - Summary of thesis hypotheses and findings

Hypotheses	Findings	
	T-tests and ANOVAs	Correlations and Regressions
Study 1: Young adults		
1. Young adults would have an <i>explicit</i> preference for brands paired with non-celebrities.	- Young adults had an <i>explicit</i> preference for brands paired with a well-liked celebrity.	
2. In line with Forehand and Perkins (2005) young adults could find <i>implicit</i> preferences difficult to overcome (show celebrity preference).	- Young adults had an <i>implicit</i> preference for brands paired with a well-liked celebrity.	
3. In line with Rozendaal, Buijs et al. (2016) recognition of manipulation transfers to <i>implicit</i> preferences (resist celebrity effect).		
Study 1: 10-year-olds		
1. Young children would have an <i>explicit</i> preference for brands paired with well-liked celebrities.	- Young children had an <i>explicit</i> preference for brands paired with a well-liked celebrity.	

Hypotheses	Findings		
	T-tests and ANOVAs	Correlations and Regressions	
2. Young children would have an <i>implicit</i> preference for brands paired with well-liked celebrities.	- Young children had an <i>implicit</i> preference for brands paired with a well-liked celebrity.		
Study 2: Young adults			
1. Young adults would have an <i>explicit</i> preference for brands paired with non-celebrities.	- Young adults had an <i>explicit</i> preference for brands paired with a well-liked celebrity.		
2. In line with the results of Study 1, young adults could find <i>implicit</i> preferences difficult to overcome (show celebrity preference).	- Young adults had an <i>implicit</i> preference for brands paired with a well-liked celebrity.		
Study 3: Young adults			
1. Young adults would have an <i>explicit</i> preference for brands paired with non-celebrities.	 Young adults had an <i>explicit</i> preference for brands paired with a well-liked celebrity. Young adults had an <i>implicit</i> preference for brands paired with a well-liked celebrity. 	- Overall attitudinal ad literacy was related to both <i>explicit</i> (propositional) and <i>implicit</i> (associational) brand preference, yet scepticism more specifically is only related to <i>explicit</i> , propositional brand preference.	

Hypotheses	Fin	Findings		
	T-tests and ANOVAs	Correlations and Regressions		
2. In line with previous results, young adults could find <i>implicit</i> preferences difficult to overcome (show celebrity preference). 3. It was expected that scores would be at ceiling for both Conceptual and Attitudinal	- General attitude to advertising was a little lower overall than might have been expected from a sample of young adults.	- Scepticism (rather than overall attituding ad literacy) was negatively correlated with <i>explicit</i> celebrity brand preference. Scepticism was not correlated with <i>implic</i> brand preference.		
literacy.		- Young adults scoring higher on the accuracy-based scepticism scale had a low <i>explicit</i> preference for celebrity paired brands. There was no significant correlation between <i>implicit</i> preference and accuracy-based scepticism.		
		- There was no significant correlation between affect-based scepticism and <i>expli</i> brand alone preferences. Young adults wh had higher affect-based scepticism had low implicit preference for brands paired with celebrities.		
		- <i>Explicit</i> celebrity brand preference and <i>implicit</i> celebrity brand preference were significant positive predictors of brand choice.		

Hypotheses	Fine	dings
	T-tests and ANOVAs	Correlations and Regressions
Study 4: Young adults		
1. Young adults would show an <i>explicit</i> preference to brands presented alone.	- Young adults had an <i>explicit</i> preference for brands presented alone.	- Young adults who scored higher on the scepticism scale before and after brand
2. High levels of scepticism to advertising would be related to lower <i>explicit</i> celebrity brand preference.		presentation had lower explicit preferences for brands presented with celebrities. There was no significant correlation between scepticism scores and brand preference score when brands were presented alone.
		- Explicit celebrity brand preference was a positive predictor of brand choice. Explicit brand alone preference was a negative predictor of celebrity brand choice.
Study 5: Children aged eight- to 14-years		Overall sample (all children):
1. Older children (aged 12- to 14-years) would match the explicit responses of the young adults of Study 4 and show <i>explicit</i>	- Overall <i>explicit</i> preference (total sample) for brands presented alone.	 A negative correlation between preference for <i>explicit</i> celebrity brands and scepticism. No significant correlations between

Hypotheses	Findings		
	T-tests and ANOVAs	Correlations and Regressions	
preference for brands presented alone (celebrity resistance). 2. Younger children (aged eight- to 10-years)	 - Preference for brands decreased with age. - Explicit brand preference was lower in the two older age groups (12- to 14-years) 	scepticism and <i>explicit</i> brand alone preference.	
would be less sceptical of advertising than the older age groups which could lead eight-year-	compared to the younger age groups (eight- to 10-years) suggesting that older children	12- to 14-year-olds:	
olds to prefer celebrity brands more than older children.	may be less susceptible to advertising.Eight-year-olds were less sceptical than the other age groups.	- A positive relationship between <i>explicit</i> brand alone preference and <i>explicit</i> celebrity brand preference.	
	omer age groups.	- A negative relationships between <i>explicit</i> celebrity brand preference and both scepticism before and scepticism after testing for the older children.	
		Eight- to 10-year-olds:	
		The above finding in the older children did not emerge in the younger children. This supports the fact that maybe eight- to 10-year-olds have scepticism but are unable to use it.	

Hypotheses	Findings		
	T-tests and ANOVAs	Correlations and Regressions	
		- In both the older and younger children sample <i>explicit</i> brand alone preference was a negative predictor of brand choice. In comparison, <i>explicit</i> celebrity brand preference predicted a high brand choice score.	
Study 6: Children aged eight- to 14-years			
1. Older children's (12- to 14-years) resistance to advertising could be overridden	- Eight-year-olds, 10-year-olds and 12-year-olds showed no significant difference in	Well-liked group, overall sample:	
by liking of well-liked celebrities meaning	explicit preference for brands presented alone	- Higher accuracy-based scepticism is	
they should show an <i>explicit</i> preference for celebrity paired brands in the well-liked group. When paired with known rather than	or with well-liked celebrity brands and no preference between brand alone and known celebrity brands.	related to lower well-liked celebrity <i>explicit</i> preference and brand alone <i>explicit</i> preference.	
well-liked celebrities this preference is likely to disappear.		- Higher affect-based scepticism is related to	
2. With lower cognitive ability younger children (aged eight- to 10-years) should		lower well-liked celebrity <i>explicit</i> preference and brand alone <i>explicit</i> preference.	

group there was a significant explicit

Fi	ndings
T-tests and ANOVAs	Correlations and Regression
	G

brands in both the well-liked and known celebrity groups.

- 3. In line with Forehand and Perkins (2005) older children could find *implicit* preferences difficult to overcome (show celebrity preference).
- 4. In line with Rozendaal, Buijs et al. (2016) recognition of manipulation transfers to *implicit* preferences (resist celebrity effect) in older children.
- 5. Younger children in both conditions will have both an *implicit* preference for celebrity brands
- 6. Older children should have higher levels of accuracy-based scepticism than younger children. This may trigger resistance in older children's *explicit* celebrity brand preferences.

preference for brands alone over celebrity brands. In contrast, in the known celebrity group there was a significant preference for celebrity brands over brand alone.

- Younger children had an *implicit* preference for celebrity brands in the known celebrity group.
- 14-year-olds had a significant *implicit* preference for brands presented alone.
- 14-year-olds had a higher level of affect-based scepticism than the other age groups.

- As *explicit* preference of celebrity brands increased, so too did the likelihood of these brands being selected as favourites.
- *Explicit* preference for well-liked celebrity brands is related to *implicit* preference.
- *Explicit* brand alone preference was a negative predictor of brand choice. In comparison, *explicit* celebrity brand preference predicted a high brand choice score.

12- to 14-year-olds:

- Children with increased scepticism (both accuracy-based and affect-based) have lower *explicit* preferences for brands presented with well-liked celebrities. The negative influence of scepticism was only seen when a celebrity was present.
- The higher the brands presented alone were rated, the less likely celebrity brands were to

Hypotheses	Findings		
	T-tests and ANOVAs	Correlations and Regressions	
7. Eight-year-olds may have the same level of		be chosen within the top three favourite	
affect-based scepticism as the 14-year-olds.		brands.	
		- As <i>explicit</i> celebrity brands preference increased, so too did the likelihood of these brands being selected as favourites.	
		- Negative relationship between affect-based scepticism and brand choice which fits with the 14-year-olds having higher affective scepticism than younger children	
		- Children with lower <i>explicit</i> celebrity preference were more likely to have lower <i>implicit</i> preference for well-liked celebrity paired brands also.	
		- The higher celebrities are rated as being well-liked, the more likely a celebrity brand is to be <i>explicitly</i> preferred.	
		Eight- to 10-year-olds:	
		- Those with higher scepticism (both accuracy-based and affect-based) have lowe	

Hypotheses		Findings
	T-tests and ANOVAs	Correlations and Regressions
		explicit preference for brands presented alone.
		- Higher <i>explicit</i> preference for celebrity paired brands related to higher likelihood of selecting a celebrity brand as one of their three favourites.
		- The higher celebrities are rated as being well-liked, the more likely a celebrity brand is to be <i>explicitly</i> preferred.
		Known group, overall sample:
		 Higher levels of affect-based scepticism are related with lower <i>explicit</i> brand alone preference.
		- The higher brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands.

Hypotheses		Findings
	T-tests and ANOVAs	Correlations and Regressions
		- As <i>explicit</i> preference for celebrity brands increased, so too did the likelihood of these brands being selected as favourites.
		- <i>Explicit</i> brand alone preference was a negative predictor of brand choice. In comparison, <i>explicit</i> celebrity brand preference predicted a high brand choice score.
		12- to 14-year-olds:
		- No significant correlations to report.
		Eight- to 10-year-olds:
		- The higher the brands presented alone were rated, the less likely celebrity brands were to be chosen within the top three favourite brands. In contrast, as the <i>explicit</i> celebrity brands preference increased, so too did the likelihood of these brands being selected as

favourites.