Experiences in the war zone, shared narratives, and shifting identities:

Systematic review of qualitative research

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Abstract

This systematic review examines qualitative research into the mental health issues encountered by military veteran personnel deployed to a combat zone. A small number of researchers have examined the often complex experiences of returning personnel using a qualitative approach to data collection and analysis. Qualitative data yield rich stories of life-threatening events that at times can have long term effects, but due to the lack of such studies, qualitative research on combat experience have not often been appraised or synthesized. Using a qualitative method for conducting systematic review, the objectives of this article are twofold: (a) to review select research literature on veteran military populations, and (b) to describe veteran's experiences using a synthesis of themes across original qualitative research. Findings are discussed with considerations for applying qualitative research methods to future research of military service populations.

Keywords: "combat experience", "war zone", "qualitative", systematic review", "synthesis"

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Current research explores issues related to combat experience stemming from military service experience onwards. Combat-related posttraumatic stress disorder (PTSD) and other issues such as depression (or alcohol misuse) are the most common clinical implications of problems related to combat service and the effect on the mental health of both currently and formerly serving personnel (Sareen et al., 2007). For example, in 2001 after the deployment of British Armed forces to Afghanistan, Iversen et al. (2005) used questionnaires to gather data and completed an extensive cohort study in 2005. Their study explored the mental health care experiences and psychological needs of UK veterans of Iraq and Afghanistan conflicts. The study found that service personnel encountered more mental health challenges associated with adjusting to civilian life after active tours of duty (Iversen et al., 2005). What this and other subsequent cohort studies of military personnel in the British Armed Forces tell us about combat experience, is that factors relating to post-service issues may have some effect on how service personnel develop psychological as well as physical health problems while serving in a combat zone (Perlin, 2004; Rona et al., 2006). In addition, longitudinal cohort studies provide valuable insight into the rigors and long-term consequences of war (Thomas et al., 2010). For instance, service personnel often do not seek treatment during or after leaving the service due to stigma about getting psychological help (Greden et al., 2010). Military personnel develop other barriers to treatment-seeking behaviour, such as avoiding the discussion of experiences of killing enemy combatants with family members and peers (Burnell, Hunt & Coleman, 2009; Maguen et al., 2011; Pietzrak, Johnson, Goldstein, Malley & Southwick, 2009). There is little specific detail

available in the quantitative literature about what service personnel think about their experiences of being in combat. Equally, there is little exploration in quantitative research of whether service personnel believe the inherent stressors of combat exposure had some level of impact on their psychological wellbeing.

The need for analysis of combat veterans' experiences in qualitative research may serve to clarify what veterans believe are the most prohibitive barriers to them seeking medical or psychological assistance (Hoge et al., 2004) and provide clinicians with evidence-based research which examine and address effective health care for and support needs relevant to veterans (Roberts, 2000). Qualitative systematic review can provide an assessment of those support needs, however, it is only in the last few years that detailed and systematic examinations of qualitative research have been conducted (Thomas, et al., 2008). Using a qualitative method for conducting systematic review, this review will select qualitative literature that describe combat-related experiences of ex-service personnel, and then synthesise the diversity and complexity of these experiences into dominant themes across these studies.

Research aims and objectives

As part of a PhD research project on studies on military combat personnel, this systematic review explores qualitative methods used by researchers to collect and analyze data and interpret findings that differ from more prevalent quantitative studies. This review will then examine what researchers discovered in veterans' narratives of war and the affect that war zone experiences had on veterans' lives after service. In order to understand the various findings in the selected qualitative studies, the systematic review synthesized the themes that were explicit across the research articles.

The protocol for systematic review must be explicit and the research must be able to

withstand rigorous examination in order to maintain a standard of quality (Joanna Briggs Institute, 2011). Therefore, this review will provide a detailed rationale for conducting systematic review and a clear description of the methodology for selecting and including qualitative studies on veterans' experiences of war. The systematic review will also explore studies based on their qualitative examination of whether veterans made sense of the challenges they experienced in combat and how psychological challenges were faced. The review will also explain how qualitative analysis was performed on data collected through interviews with service personnel about their thoughts and experiences of different wars and conflicts. Finally, in order to examine the primary data in the research, the review will apply a thematic synthesis to themes in the selected articles, bringing together an amalgamated picture of what veterans thought about their exposure to conflict. The problems encountered by qualitative researchers collecting data from various veteran populations across the selected qualitative studies will be examined and described throughout the review as well as in the discussion section. This systematic review did not include a search of the Cochrane Reviews or Campbell Collaboration databases because these databases collate quantitative articles and very few qualitative studies (Popay, et al., 2006).

Firstly, the review will begin with a description of the rationale for conducting systematic review. Next, a selection of quantitative and qualitative literature on combat veterans' studies will be assessed. Then, the methodology for selecting qualitative studies on combat veterans' experiences and issues related to combat exposure will be presented. Finally, an explanation of the thematic synthesis of the findings in the studies is detailed. The review will conclude with the discussion and contribution of such studies for future research.

Rationale for systematic reviews

Historically, systematic reviews were borne out of a health psychology, evidence-based movement of inquiry into treatment practices and the assessment of treatment outcomes (Noyes, Popay, Pearson, Hannes & Booth, 2008). The systematic review is designed to summarize and synthesize numerical findings collected through randomized controlled trial (RCT) and statistical studies (Evans, 2002). In the 1980s as the call for a quality assessment of the findings in research became more important, there was a growth of randomized controls and evidence-based trials of interventions enabling the testing and quality assessment of effective patient interventions (Dixon-Woods et al., 2006). Cochrane Reviews is a database which was developed in response to a need to collect systematic reviews on evidence-based health care and interventions in one location. In line with the demand for more formal reviews and the synthesis of research findings on interventions, Cochrane Reviews initiated further guidelines for the systematic examination of evidence of the effectiveness of a range of medical interventions, the measuring of findings of research articles using statistical analysis, and the systematic synthesis of data (Dixon-Woods et al., 2006; Noyes, et al., 2008). Feedback from patients about their experience of treatment for example, was sought out by researchers and clinicians alike. Collection of data from large samples appeared to be justified and efficient in the interest of designing and testing efficacious treatment for the general population (Dixon-Woods et al., 2006).

The disparate nature of methodologies used to collect and analyze qualitative data in both medical and social science articles can result in research findings being unclear (Barnett-Page & Thomas, 2009; Noyes, et al., 2008; Noyes, 2010). Gradually, the need for the application of systematic examinations of research design and analysis of findings in qualitative research is beginning to grow (Crowe & Sheppard, 2011), alongside the prevalence of more traditional

quantitative systematic review. Researchers who adopt qualitative methods to conduct interviews with service personnel find that the experiences shared by veterans are information-rich (Burnell et al, 2006, 2009; Kilshaw, 2003), however this method of data collection and analysis is underused. Complimenting quantitative with qualitative systematic review may also allow researchers to understand how ex-service personnel perceive the effectiveness of interventions that are available to them as healthcare service users.

Research on veteran personnel and combat-related disorders

Systematic reviews have often been conducted on quantitative studies of personnel with combat-related disorders using large war cohorts (Sareen, Cox, Afifi, Stein, Belik et al., 2007; Fear, Jones, Murphy, Hull, Iversen et al., 2010), and longitudinal and comparative studies (Iversen, Nikolaou, Greenberg, Unwin, Hull et al., 2005; Fikretoglu, Elhai, Liu, Richardson and Pedlar, 2009). Most of these and similar studies, evaluate the efficacy of intervention programs. For example, Iversen and colleagues (Iversen et al., 2005) tracked the psychological and physiological conditions of UK military personnel at the beginning of their service history and through to the end. The published report was driven by the need to collect longitudinal data from ex-service personnel after their return from the campaigns in Iraq and Afghanistan in 2001 and 2005 respectively. This cohort 'Era' study found that: post-traumatic stress disorder (PTSD) was less common than depression; psychological disorders were most prevalent amongst younger ranking servicemen, and; a little over half of those servicemen were seeking help (Iverson et al., 2005). The report has led to further research which supports the findings of the 2005 study (Fear, Jones, Murphy, Hull, Iversen, et al., 2010). Conversely, other researchers have found that the diagnosis of PTSD (as well as other psychological and health disorders) has increased in prevalence particularly amongst US veterans returning from the same campaigns in Iraq and

Afghanistan as British veterans (Sareen, Cox, Afifi, Stein, Belik, Meadows and Asmundson, 2007; Thomas, Wilk, Riviere, McGurk, Castro, et al., 2010). Discrepancies in psychological presentation of disorders among veterans may be due to potentially delayed onset or recurrence of combat-related trauma in later life (Burnell et al, 2009).

If the array of quantitative research available on the subject of combat-related traumatic experience highlights discrepancies between the incidence and prevalence of combat-trauma (as in the studies presented above), then available quantitative studies call into question the suitability of a variety of psychological interventions administered to military patients presenting with symptoms that may or may not be associated with combat exposure. This presents an opportunity for qualitative research to explore how combat personnel may talk about, avoid discussion, or evaluate their individual experience of combat. As a result, the qualitative systematic review is a growing field of research that is addressing the need for processes and practices for conducting qualitative research (Popay et al., 2006) and the progression and refinement of good quality research techniques (Dixon-Woods et al., 2007).

Qualitative studies of combat personnel's experiences

Research into the care of US military personnel has found that ex-service personnel had a contribution to make as to the etiological theories of psychiatric injury resulting from combat and the treatment of those injuries (Hoge et al., 2004; Hoge, Auchterlonie & Miliken, 2006; Hoge, 2010; Lancet, 2010). It is argued that people create narratives or stories to organize and make sense of experience and life events; particularly those events that challenge the predicted life course, such as trauma or illness (Riessman, 1990). Considering the implications of mental health issues related to combat service, it is important to understand how veterans with conflict-like or combat-exposed trauma conditions make sense of such experiences, particularly due to

the long-term impact that disorganization of memory, avoidance and recurrence of trauma stressors may have on veterans across war generations (Spiro III & Settersten, 2012).

To understand what qualitative studies say about the experiences of military personnel, a systematic review of available qualitative studies on the subject of war experience and consequences arising from combat exposure was conducted.

Methodology

Qualitative data collection and analysis – the methodological subjects of this review – do not conform to the criteria or methods usually applied to traditional quantitative systematic reviews. However, there is much less uniformed guidance on how to conduct systematic reviews that apply the same principles of rigor used in quantitative studies to qualitative research articles (Evans, 2000; Hawker, Payne, Kerr, Hardey & Powell, 2002). As such, research in the area of qualitative systematic review is fairly recent, the qualitative research on experiences of military service is less available, and the quality of the research available is rarely assessed. Apart from testing research evidence and the relevance of the research that meet the aims of systematic review, the appraisal of quality in the research data plays a significant role in the methodology for selecting and including research studies in systematic review (Noyes, et. al, 2008). Meyrick (2006) expressed a need for the assessment of quality in qualitative research studies which would meet rigorous standards for data collection (systematicity) and clearer explanations of all the processes involved in qualitative research (transparency). Therefore, not only was this review concerned with searching for qualitative studies on the combat experience of veterans, but the search had to yield studies that met the quality criteria for inclusion. After articles were appraised, a synthesis of the findings was performed on the literature using a clear and reproducible process of aggregating the themes in each of the studies (Hawker et al., 2002;

Thomas & Harden, 2008).

Quality of research data

As mentioned above, one of the most significant current concerns of qualitative research is the adoption of processes that conform to best practices for conducting original qualitative study (Hawker et al., 2002). As a result, the relevance, quality, and best practice used in research, and the criteria for the inclusion of articles for this systematic review, depended on the clear explanation of how the research data was collected, how researchers decided on the themes of the studies and how findings were analysed and discussed. Following the appraisal and inclusion model of Hawker et al. (2002), this review identified as many peer-reviewed articles relevant to the research aims to not only include studies that detailed the experiences of combat soldiers and subsequent mental health issues, but also to search for articles that used rigorous qualitative research processes to conduct their studies (Dixon-Woods et al., 2006).

Database searches

As described above, this qualitative systematic review examines the processes used to gather data and interpret and analyze information from interviews with participants who have been exposed to military combat conditions. A search was initiated for articles that clearly explained the methodology used by researchers to collect and analyze how research participants described and made sense of their combat narratives. The chronological stages of the search for articles were performed as follows:

A keyword search using CINAHL, EBSCOhost, MEDLINE, PsycINFO,
 ScienceDirect, Web of Knowledge databases yielded a search return of 1,763 peer-reviewed articles (excluding dissertations and thesis) published between 1953 and 2010 and 433 articles which were potentially relevant to the review.

- 2. The researcher read and re-read article abstracts and searched for clear descriptions of the methodologies used in each study.
- 3. A further manual reading of relevant abstracts resulted in five articles meeting the criteria for inclusion and review.

Broad search keywords were used to find relevant peer-reviewed articles. Search terms such as "combat experience", "veterans", "combat exposure", "war zone" "deployment", "soldier", "mental health" and "qualitative" were entered into searchable online databases. The search was narrowed to select studies that applied an analysis of data and organized data into themes of veterans' combat experience. This review was interested in experiential accounts of war and a clear explanation of the processes used to collect and interpret those accounts. Therefore, the researcher attempted to find articles that described the methodology used in each of the studies that were qualitative and thematic in nature, with clear descriptions of the analytical process. A further search using keywords like "themes", OR "thematic", OR "analysis", OR "qualitative method" were also entered into the online database. The researcher read and re-read abstracts and the methodology of each study in order to determine if a thematic synthesis could be applied to the data. After this advanced search was conducted, a further manual reading (or hand-search) of abstracts found articles that were specific to veterans' discussion of their experiences in military campaigns and a qualitative analysis of those experiences. After these specific data mining processes were conducted, the search returned five research articles. This decrease in the return of relevant research articles was perhaps due to the evident lack of qualitative research in combat-related trauma.

Inclusion criteria

The articles included in this review gave an explicit account of the methods used, the participant selection processes and detailed analyses of data collected through interviews. The articles which were then included corresponded to the research question in that the methods used for analysis of war experiences were qualitative in focus, rigorous in their approach to research methodology, data collection and analysis, and, clearly explained how themes were used to categorize war experiences of veterans. Other criteria which qualified articles for inclusion were the quality of analysis of experiences and mental health problems experienced by military personnel as a result of combat service, as well as the clear interpretation and presentation of data. To analyze the available literature on combat exposure, these inclusion criteria were followed:

- Interviews began with open-ended questions to gather first-hand accounts of military service experience;
- Qualitative analysis was performed after data collection;
- Themes were explored that made tentative conclusions using participants' beliefs about the role of experience of war on their personal and/or professional lives.

The articles were assessed for their quality and details of the inclusion criteria and selection processes are listed in the appendix to this review (Appendix 1). Studies that met the criteria for inclusion, examined the experiences of service personnel in the war zone. The studies included qualitative analysis of interviews, archival materials on peacekeepers and soldiers who have served in combat areas, nurses who provided medical care to combat personnel and discussed traumatic experiences, and the perception of the effects of war or perceived threat to life either to self or witnessed threat to others in a combat environment. Articles were included whether

service personnel were still in service or had left the service, with at least one year between their last deployment and being discharged from the Armed Forces.

Data abstraction

Once articles met the inclusion criteria as set out above, they were read by the reviewer and the data relevant to the review was abstracted. The articles were appraised to determine whether they included a clear explanation of the research process, for the quality of the methods applied to the interpretation and analysis of data and their relevance to the subject of the research. The data from those studies which were included in the review were abstracted and a list of those studies is included in Appendix 1.

Articles were reviewed by the researcher and were re-read to understand the specific patterns of themes that were relevant to the research question (Dixon-Woods et al., 2006; Barnett-Page et al., 2009). All research included in this review, collected and interpreted data from audio interviews with currently serving personnel (at the time of study). Ex-service personnel who had served in a combat zone and those who had supported service personnel in a medical unit were included because their experiences resembled the combat trauma experience of combat soldiers. As in Appendix 1, studies applied an Interpretative Phenomenological Analysis (IPA) (Shaw & Hector, 2010), or an ethnographic approach to data collection (Kilshaw, 2004). Other studies applied phenomenological, content analysis, thematic analysis and Grounded Theory models to assess transcripts of interviews (Schok, Kleber, Boeije, 2010; Scannell-Desch and Doherty, 2010; Burnell, Coleman & Hunt, 2006). Researchers used interviews and questionnaires completed by participants and analyzed data focusing on mental and physical health, experiences in combat, and life after leaving the military. Transcribed data from interviews relied on participant recall of events. Such reporting of events that happen to an

individual may be vulnerable to subject bias (Adams, Soumerai, Lomas and Ross-Degan, 1999). However, the collection of qualitative interviews in one study received multiple readings and cross-analysis by researchers involved in the study to limit researcher bias as much as possible (Scannell-Desch et al., 2010). For example, Scannell-Desch et al. explored combat experiences of nurses and determined reliability of the thematic content between investigators through a rigorous confirmation and validation process. The research team had to identify and then agree on themes by consensus (Scannell-Desch et al., 2010).

Synthesis in qualitative research

As described above, there are different processes for identifying themes in qualitative research (Barnett-Page et al., 2009; Kastner et al., 2012). There are also a number of ways to synthesize findings from multiple studies. Framework synthesis, for example, seeks to extract primary research data and explain findings within a structured context and in a detailed way (Thomas et al., 2008). Meta-synthesis develops, validates and supports models or theories that are generated out of quantitative research data (Booth, 2001). Meta-ethnography and interpretive synthesis are the equivalent process of combing evidence in research and theory-generation for qualitative review (Noblit & Hare, 1988). Grounded theory allows for the constant evolution of theory-generation from the concepts and ideas that emerge from primary research data (Kastner et al., 2012). It is not the central aim of this review to explain in detail all of the themes from each of the studies included in the review. The research articles collected in the review used different types of qualitative analysis such as thematic, interpretive and ethnographic analysis to explore a range of experiences. These diverse experiences were organized and integrated into this review for further analysis.

As the review was concerned with examining, describing and analyzing themes already

extant across primary data in the studies (and not the generation of new theory) it was determined that an approach consistent with qualitative synthesis of the breadth of experiences was appropriate. The application of these concepts in a secondary review of the qualitative findings could be achieved with thematic synthesis that allows comparison and another interpretation of the primary data (Thomas et al., 2008). Bringing together knowledge from diverse studies using the thematic synthesis method as suggested by Thomas et al. (2008) can be applied to studies that use qualitative methods of analysis to interpret primary data. A synthesis of different data collected from the research literature, assumes that information may be lost, particularly when using a thematic system to organize and present findings (Hawker et al., 2002; Jones, 2004). Nevertheless, gathering as much detailed information as possible from these qualitative studies, is important for understanding the experiences of the veterans, how they make sense of those experiences, and how service providers may improve on the efficacy of healthcare service interventions. Each of the studies reviewed sought to highlight the stories of soldiers after they leave the service and to understand how they evaluate these experiences and how experiences are communicated. The qualitative studies under review attempted deeper analysis of the data to explore the behavior, attitudes and self-perception of veterans after service. The qualitative methods used to describe experience were varied. As there was a diverse collection of experience, the review amalgamated and interpreted the data into a set of descriptive themes. Peacekeepers interviewed in a qualitative study by Schok et al. (2010) believed that they had suffered serious consequences of service in Cambodia. Burnell et al. (2006), for example, reviewed existing conflicting evidence about the physical and psychological condition of soldiers who had served in the 1982 Falklands war. Burnell and colleagues found that the service experiences and associated physical and psychological problems of the Falklands

war veterans were receiving very little acknowledgment either by the British public or the medical profession. Their study set out to interview veterans of the Falklands to gain their perspective of the war, using thematic analysis to determine how veterans recalled their narrative of trauma. Themes within the data emerged around informal support networks such as family and fellow soldiers. Service personnel also discussed the effects that successful or unsuccessful reconciliation of trauma narratives have on making sense of their lives after service. Concepts like trauma narratives and assessment of wellbeing after service appeared in other data in the research articles included in systematic review. Qualitative methods can provide a wealth of information to support existing research and expand on what we understand about the experiences of ex-service personnel from the individual's perspective and across war cohorts (Hawker et al., 2002). Therefore, qualitative studies were examined where psychological challenges faced by military personnel are described by the individual and then explored by researchers through the use of clear and predominant themes.

Qualitative systematic review of combat-related experience

Quantitative research studies employ guidelines, protocols, and practices for conducting research. Qualitative systematic literature reviews have also being adopted protocols for assessment of quality (Jones, 2004) and rigor in systematic review that "combines findings across a range of studies" (Dixon-Woods, et al., p.28, 2006). The articles included in this review gave an explicit account of the method used, the participant selection process and a detailed analysis of data collected through the interview process. The articles which were then included, corresponded with the research question in that the methods used for analysis of war experiences were qualitative in focus and rigorous in their approach to methodology and explanation of themes related to war experience. Therefore, data from the collected studies were included,

analyzed and synthesized using available approaches for research and current strategies for qualitative systematic review (Dixon-Woods et al., 2006).

Keeping the communication of experience in mind and the different methods for performing qualitative systematic review, this review attempted to aggregate an understanding of the military professional facing post-deployment mental health challenges from a qualitative methodological perspective.

Research that applied a qualitative analysis to how ex-service personnel make meaning of their experiences in combat examine a range of subjects from peacekeepers in Cambodia (Schok, Kleber, & Boeije, 2010) to veterans of Iraq and Afghanistan (Shaw et al., 2010). Keeping these different conflicts in mind, systematic review was performed on qualitative literature about the mental health of military personnel with varying war experiences with the aim of examining how information was collected and analyzed, and what information has emerged from those studies. It was therefore necessary to apply a method of synthesis that would meet the challenges and aims of this review. A synthesis of categories or themes in the data was performed on the studies to acquire a better understanding of the experiences of combat, and the consequences for the mental health of service personnel who have served or may continue to serve in a war zone.

Since the method of qualitative analysis of combat experience is a rarely explored area of research, it was necessary to introduce a thematic synthesis of the themes explored in the literature that also met the aims and objectives of the systematic review. The process of synthesizing themes would also need to provide an accurate account of the content presented in the reviewed articles (Barnett-Page et al., 2009). An attempt was then made to summarize themes collected from research studies with disparate methods of analysis (Hawker et al., 2002).

Synthesis of themes in selected research studies

The subjects of the studies in this review included combat soldiers in Cambodia, the Falklands War, the Gulf War, and more recent campaigns in Iraq and Afghanistan. The participants also included medical service personnel who, faced with treating soldiers either wounded or killed in Iraq and Afghanistan, were also experiencing symptoms of combat-related trauma similar to soldiers on the frontline. A review of familiar themes across the qualitative spectrum of research from the perception of the military service personnel provided a perspective about mental health issues related to combat that may be overlooked by quantitative research. Five themes were synthesized from the research articles which were: (a) military experience described as work or a job, (b) forming bonds through collective narrative and experiences, (c) narratives of identity before and after war, (d) narratives of war and the reconciliation of war memories; and (e) impact of service experience on personal and professional life.

Military experience described as work or a job

Being in the military was associated with performing a job. Shaw et al. (2010) interviewed participants who described working in close contact with other military personnel and the duties which were involved in their day-to-day descriptions of work. Schok et al. (2010) interviewed service personnel who had served in Cambodia and their peacekeeping missions were simply what they were trained to do as part of the team's focus. Some veterans described working in a world that was dangerous and uncertain and alongside Cambodian people who had suffered under oppressive conditions. Working within a dangerous environment was part of their training and they were deployed to do a job within those conditions. This job as service personnel was simply part of their duty (Schok et al., 2010, p. 287). In Shaw & Hector (2010), the superordinate theme of the researcher's phenomenological interviews with military members focused on the job

of the military individual. The researchers used participant quotations to describe their experiences as active service personnel who were stationed in either Iraq or Afghanistan (Shaw, et al., 2010). The everyday lives of veterans involved combat; combat was described as work which meant fighting an enemy in a combat-zone. Burnell et al. (2009) conducted interviews with veterans of the Second World War who discussed their participation in fighting the war as work: "...yeah... I enjoyed flying... it never bothered me...it's a job...just a job...work which I was being paid for..." (p. 99). This veteran described his job as a fighter pilot flying war planes during the Second World War; the working environment was the plane and fighting in the war was a matter of paid work. It is not, in either of these instances of war as work, but that the job of the Iraq soldier and the Second World War veteran was part of training and the individual was tasked with performing duties in extraordinary conditions and circumstances. Their casual descriptions of work usually involved danger and a possible threat to life.

What is also alluded to in some of the veteran's stories, is the affect that the collateral events of their everyday jobs as combat soldiers had on their lives either after service, or while they were at home on leave. Some soldiers described the difficulty with which talking about their jobs presented family members and work colleagues. When interviewed, soldiers in Kilshaw's 2004 study openly discussed the physical and psychological effects of symptoms they associated with their role as combat personnel in the Gulf War: "...I started despising myself because I was like an old cripple. My mind wasn't working right, and I was turning into an old man. I felt I was dying from the inside." (Kilshaw, 2004, p. 154).

What other military personnel have experienced in wartime adds to the narrative of war zone stories that are not shared in quantitative studies, but can still provide insight into the problems faced by personnel and the collateral impact of war experience (such as working in

dangerous environments) which can remain unknown or undiscovered for various reasons related to diagnosis, delayed onset of symptoms or other stressors encountered at home (Burnell, et al., 2006; Kilshaw, 2004). Vogt and colleagues studied Vietnam War veterans to compare the levels of satisfaction and attainment between personnel who served in military campaigns in Vietnam, and those who had never served at all (Vogt, King, King, Savarese & Suvak, 2004). They found only a minimal relationship between the stressors of combat and how veterans evaluated their satisfaction and achievements after service. To what degree levels of personal satisfaction could be explained by participants was not explored in the study, but it is important to note that the study findings were in contrast to other quantitative research in the field which found stronger associations between war-zone stressors and mental illness.

Forming bonds through collective narrative and experiences

Identity was associated with being part of a group of trained military professionals, trained to perform their jobs. Across four of the articles, there appeared to be a story that unified each military professional around the experience of war, whether deployed to the front line, working as a military nurse, or not deployed at all. Schok and colleagues (2010) describe a comradeship that was developed between soldiers on a mission in Cambodia where one soldier reports: "yes we went through fire for each other" (Schok, 2010, p.289). In the Burnell et al. 2006 study, the comradeship during the Falklands War conflict was very important for soldiers and the bond that was created through shared experiences were expressed as follows: "There is a bond you form with these people... because you've been through the same experience that never goes away" (Burnell et al., 2006, p. 285). Kilshaw (2004) also explores the comradeship of the Gulf War veterans in the United Kingdom who defined themselves as a group sharing a physical illness, further categorizing their experiences within the framework of an illness narrative: "Everyone

can associated with each other with each other's symptoms. They know what you are going through" (Kilshaw, 2004, p. 153). This categorization within a narrative of physical ill health both aligned and separated Gulf War Syndrome sufferers from other military personnel who were suffering from psychological disorders because although their symptoms were related to conflict experience, the diagnosis of the phenomenon was contested and continues to be debated) by the medical profession (Kilshaw, 2004).

With regard to shared narratives about mental health issues related to combat and the stigma of treatment-seeking, Sayer, et al. (2009) highlighted veterans' accounts of being told that there was nothing wrong with them after returning from Vietnam. Mental health problems among US Vietnam veterans were not socially acceptable and were disregarded. Likewise, with UK veterans returning from the first Gulf War, the soldiers themselves believed they suffered real psychological and physiological effects of exposure to toxins in the Gulf, however the medical community determined that such claims were unrelated to any exposure to harmful chemical warfare in the Gulf. Only until the soldiers created a dialogue with other soldiers of their experiences of the Gulf War that the ideas around Gulf War Syndrome (GWS) were considered worthy of debate (Kilshaw, 2004). Instead of accepting global claims that GWS did not exist, or that mental health problems can be associated with combat exposure, these soldiers' dialogues on post-deployment mental health problems lead to the investigation of the stressors of combat experienced by both serving as well as ex-military personnel. The obstacles they face with regards to treatment-seeking, treatment initiation, acknowledges and supports the concept that obstacles to care do exist within this population.

Narratives of identity before and after war

Psychological problems reported by military leavers include, but are not limited to, posttraumatic stress disorder (PTSD), anxiety, depression and alcohol misuse. The changes in the soldiers in Kilshaw's study (2004) were centered around physical illness narratives of individuals who were healthy before their deployment to war, but who had been affected by physical changes that they believed were as a result of their experiences after their return from service in the Gulf. The participants in the study attributed those changes to being exposed to toxic chemical warfare. Scannell-Desch et al. (2010) described the experiences of military nurses and how they attributed their transformations to deployment: "I'm a different person now"... "I wonder if I'll ever be who I was before I went to Iraq" (Scannell-Desch et al., 2010, p.10). Reed (2001) discovered that the identity shift from service person to civilian could be as disruptive and transformative as the shift from joining the Armed Forces and being deployed to a war zone. In Kilshaw (2004), Gulf War soldiers discussed their ideas on masculinity and how those ideas were changed after they encountered the first signs of symptoms related to GWS. They described various feelings of aging, of not being fit and of not being able to perform functions that challenged what they believed to be associated with their masculine selves:

The guys with osteoporosis, that got to me a bit. Because that's an old woman's disease, sitting around too much. But these guys are active, young men and they are crippled by an old woman's disease. And that did disturb me. (Kilshaw, 2004, p. 155)

Among the veterans' concept of identity in the study of Falklands war veterans in Burnell et al. (2006), was that being a Falklands veteran and a Royal Marine, solidified the identity of the individual and helped to establish a sense of cohesion in the qualities associated with having

served. The individual was better able to deal with the experiences of the war. For some, coping with experiences, involved complete separation from former colleagues or staying in close touch with a few comrades post-service, while others who were still serving as active duty personnel helped each other to manage the trauma of being in combat conditions:

A lot of our actual [trauma] management is done with the group of men that work together....we go out get heavily drunk... talk about things.. swing the lead..tell stories.. feel better about it and go on and get on with the next day (Burnell et al., 2006, p. 285).

Sharing stories of combat served to promote a 'close-knit team' (Burnell et al., 2006. p. 285) and through developing these links, soldiers could discuss their service. But the idea that they were sharing narratives about their combat experience was simply sharing stories, not memories that may be considered as potentially traumatic. In this narrative, the combat soldier appears to believe the idea that an organized sense of self could be weakened by talking about the effects of the experiences of war. The consequences of military combat did not need to be discussed as they were perhaps accepted as conditions of the experiences in war. Consequently, to speak about one's feelings was not part of the identity or narrative of the active duty soldier, nor the veteran. Indeed, the concept of trauma is not mentioned, nor the idea of traumatic memories alluded to in the interviews with participants in the studies under review. For instance, Kilshaw states that in the interviews with the Gulf War veterans, they:

do suggest that there may be a small psychological component, they stressed that this was not central to nor primary to their condition. Indeed, they seem to respond to the people they see as their 'critics' or 'non-believers' in these discussions. They refute the suggestion

that the illness is a post-traumatic stress reaction... (Kilshaw, 2006, p. 156).

For the subjects in Kilshaw's study, the narrative of illness is one centered on the dispute among the medical community about the condition of GWS or Gulf War illness. To distinguish the physical conditions that affect veterans suffering from GWS, those veterans sought to differentiate the condition from a psychological problem. Their discourse was around the very distinct and, for them, physically destructive and debilitating phenomena of the affects of toxic exposure during the Gulf war. By comparison, the discourse of combat veterans of other wars examined in the research was deeply connected to the associated psychological trauma of combat stressors. When examining the different war cohorts, researchers should be aware of the specific concerns that are discussed between veterans of diverse war experience as these experiences have implications for how they identify themselves in relation to war stories and whether or not they recognize and acknowledge their position within individual or collective stories before and after war.

There is a motivation in military psychology to explore the military experiences of service members. The focus on combat exposure and treatment has generated a vast amount of interest from researchers, with the purpose of collecting meticulous data of substantial samples from the military population about the psychological and physical stressors of war or resultant trauma. These data can provide information of interest to the medical and psychological communities (Gray, Gackstetter, Kang, Graham & Scott, 2004; Greden et al., 2010), as well as to a greater general public (Dandeker, Wessely, Iversen & Ross, 2003; Greenberg, Thomas, Iversen, Unwin, Hull, et al., 2003; Brewin, Garnett and Andrews, 2011). For example, in patient studies, merging findings from various studies improves the quality of the research as well as the

transferability of the results in treatment practices (Evans, 2002).

Narratives of war and the reconciliation of war memories

With a review of the information in qualitative literature, the assessment of healthcare needs as established by combat veterans themselves can provide researchers, policy makers and clinicians with better information and assessment of the services perceived by the veteran population as the most appropriate. As mentioned earlier in the review, unexplained health problems suffered by veterans of the Gulf War come under the collective description of Gulf War Syndrome (GWS). This syndrome was identified by Gulf War soldiers themselves in the United Kingdom (Kilshaw, 2004). Soldiers believed they had contracted unique illnesses as a result of their exposure to organic agents used against them in the Gulf War campaign (Kilshaw, 2004, p.150). Sufferers used their own accounts of symptoms to identify a problem that was not being recognized by medical or military institutions. GWS continues to be a disputed condition. However, to counter the rejection of their illnesses by the medical community and to make sense of what was happening to them, soldiers discussed their experiences and "narratives can be seen as strategies for organizing personal experiences in culturally intelligible scripts (Kilshaw, 2004, p.150). A collective narrative discourse established a sense of validation of GWS. How the narrative around GWS is constructed by veteran's identity reconciles what they believe to be true for them. Collective validation and interpretation of experience of illness was intrinsic to GWS and making sense of what happened in combat (Kilshaw, 2004). The individual narrative was one of isolation; the collective narrative was rich in meaning and sense-making borne out of lived and unique experiences. The process of assimilation and reconciliation of experiences is the narrative collective which was exemplified by the label assigned to the unexplained symptoms of GWS and taking on the label of being a GWS sufferer. The identity shared by GWS sufferers

was created by them and provided anyone who accepted the label with a shared identity, participation in a particular culture and support for the illness. Taking control of the language around GWS from a social construction of meaning was necessitated for these soldiers by the absence of validation from society of their experiences.

Empowerment from and an acknowledgment of the soldiers' known experience of illness was thus created in the discourse between soldiers and the organisations that recognized GWS as a valid psychobiological complaint (Kilshaw, 2004). Knowing what the public did not know further established a narrative only accessible to those who experienced war. As one soldier in Shaw and Hector's 2010 study of experiences in Iraq and Afghanistan explained: "That's the misconception the public has is, everybody is over there day to day pulling out bayonets, firing and shooting. But most people did not fire their weapon" (Shaw et al., 2010, p. 132).

Individual narratives of war experience are sometimes shaped by the society in which the person belongs. For example, Lomsky-Feder (2004), interviewed veteran Israeli soldiers who served in 1973 in the "Yom Kippur War". The collective narratives of the war were created within a framework of personal memory governed by cultural context (Burnell et al., 2006; Schok et al., 2010). While some Israeli veterans attribute an appraisal of war as traumatic, other veterans saw their involvement in the event and the event itself as heroic (Lomsky-Feder, 2004). Theoretical support for themes introduced in the discussion section of the studies in the review tended to use findings from other research as well as detailing transcripts from the interviews collected from participants in each study.

Impact of service experience on personal and professional life

Research in the field of trauma, explores the importance of concepts such as resilience, coping and adaptation to traumatic events as a means by which individuals that develop effective

coping strategies, process emotional distress. Individuals may even develop positive outcomes after a period of recovery (Vogt et. al, 2004). Providing research into the problems faced by the military population returning home, aids in the development of tailored and effective psychological interventions. Designing treatment targeted at young-adults appears to be one of the most beneficial of interventions, providing some support for younger ranking personnel transitioning from military to civilian life. What ex-service personnel themselves believe to be the etiology of psychiatric injury may require more attention. What we learn about the impact of experience for veterans of the Falklands War from the Burnell et al. study (2006) was that communication of traumatic memories was avoided. Veterans chose not to talk, or experienced barriers around opportunities to talk while in service: "It doesn't need to be said... you can hint towards it...they'll nod.. and you'll know that they know" (p.285). Barriers to talking about trauma memories were also encountered at home:

I tried to tell someone once about it and they said...'oh well never mind'... and that's not the kind of thing that you want to hear.. and it made me angry,,, I don't think I ever talked about it again (Burnell et al., 2006, p.286).

For Schok and colleague's (2010) Dutch peacekeepers in Cambodia, participants in the study either separated the narrative of experience from self, avoiding remembrance altogether, while other service persons were able to put experiences of their missions into perspective and make meaning of their time in an extraordinary (militarized) world: "I want out, I don't want to talk with people. Every time these images keep coming back stronger. Things keep coming back bigger than I want them to be" (Schok et al., 2010, p.296).

Changing selves as a result of war experience was one feature of the discussion on mental

health in Scannell-Desch et al. 2010 study of medical personnel in Iraq. One army doctor stated: "I'm amazed by how many can't get back into our lives because we are affected by this experience" (Scannell-Desch, et al., 2010, p.10). In the case of this medical service person, there was a genuine connection between the experience of treating casualties (or witnessing fatalities) in theater and medical personnel having difficulty getting back to the lives they lead before they were deployed to war.

Because there are a multitude of types of war experiences, and there is a difference in opinion about how to treat those who have combat-related psychological issues, a broadened understanding of how veterans evaluate their experiences of war and how those experiences are interpreted by veterans as well as researchers, can be achieved by combining and analyzing varied service experience using a qualitative perspective.

Discussion

This review aimed to explore the qualitative research methods used to analyze data, and to synthesize the depth and breadth of themes that were attributed to accounts of the ex-military personnel interviewed in each of the studies. What we have learned about the mental health issues that affect service personnel, are that psychological problems after combat exist. The qualitative researcher reviewing existing quantitative evidence-based literature on psychological interventions is exposed to studies that examine interventions for combat-related trauma, particularly PTSD (Foa, 2009; Karlin, Ruzek, Chard, Eftekhari, Monson, et al., 2010), but very little by way of detailed examinations of the stories of experience as told by military personnel, veteran's perception of the psychological interventions that are administered to them, or whether service personnel believe those interventions are accessible or appropriate (Kilshaw, 2004; Burnell, Hunt, and Coleman, 2009; Shaw and Hector, 2010; Schok, Kleber, Lensvelt-Mulders,

Elands, and Weerts, 2011).

The quantitative systematic format excludes other types of study design that although lacking statistical power, may provide just as much information as large-scale, generalizable studies (Noves et al., 2008). For example, systematic reviews may exclude other contributions from qualitative methodological approaches to military research that uses smaller samples of participants, yet has as rigorous an examination of war experiences and potential psychological implications for combat-related trauma and intervention. As pointed out earlier in this review, the narrow scope of quantitative research may not provide a detailed discussion of mental health problems faced by service personnel. Discussion of challenges post-deployment is rare either due to the stigma attached to seeking help (Pietrzak et al., 2009) or by the assumption of veterans that other non-combatants may not be able to understand (Kilshaw 2004; Burnell et al., 2006). Qualitative studies may seek to raise the issue of stigma within the culture of military personnel by allowing a frank discussion of those barriers to help-seeking. Since 2001 and 2003 when the Afghanistan and Iraq wars began (respectively), there has been a steady increase in the number of researchers exploring the quantitative data on psychological as well as physical injury related to war, as well as the psychosocial elements that transitioning from fighting in a war zone, to becoming a civilian entails (Shaw, et al., 2010).

Developing a catalogue of knowledge about combat experience presents a challenge for researchers and medical professionals alike, as experience of combat differs between veterans and across war generations. The synthesis of themes was applied to research that involved different experiences of combat. The contribution of the stories of combat through the qualitative interpretative lens provided an understanding of the experiences of ex-service personnel and the series of challenges they must face once they return home. In the event of stressful experiences

(and in this instance, the experience of war), it was important to understand how the military service professional appraised experience and evaluated the perception of threat to life. It is also important to consider the process by which past experiences are important for reconciling past experiences with future self-development (Schok et al., 2010; Scannell-Desch et al., 2010). Even by combining the growing qualitative and existing quantitative methods of research into combatrelated trauma, researchers may expand upon what is already available on the subject of war experiences, as well as add to the systems of analysis for interpretation of the data.

Limitations and future research

The lack of available qualitative study into the experiences of soldiers, particularly with regards to the most recent campaigns of Iraq and Afghanistan, means that a large sample of research articles is difficult to collect and assess for inclusion. Military campaigns are ongoing at the time of writing, and therefore, available data from personnel who have served both as combat personnel and as medical military staff with experiences of combat, is still at an early stage. The qualitative studies selected for inclusion were in English and published in peer review journals. As such, a single independent reviewer assessed only full-text articles found on various medical, specialized psychological, and social science databases using English search terms. Documents that were not formally published (grey literature, such as dissertations or conference seminars) were excluded. The problem faced by this systematic review of themes of war experiences, is the lack of systematic literature reviews of qualitative research in general and the qualitative study of combat experiences of service personnel in particular. Finding qualitative articles across various social science and medical databases present many challenges which may be due to the lack of quality in indexing those articles. For example disparate search terms like 'qualitative research' and 'thematic analysis' may be used on one database but not another, lacking consistency in the

cataloguing of articles and making the tracking and identification of search terms in abstracts a difficult process (Dixon-Woods et al., 2006; Hawker, 2002). Indexing is a problem that is not encountered with quantitative research on electronic databases, and this review attempts to examine the format in which the story of war is presented using a qualitative framework to search for, critically appraise and include studies for synthesis. The wealth of information collected through qualitative studies from the literature reviewed, may encourage other researchers to adopt a qualitative method of inquiry in their collection, analysis and interpretation of data. Research may therefore attempt to aim at providing evidence-based practices with as much data rich information as possible as long as the indexing of articles follows a standard practice, and especially when varied methods of data collection and analysis are used.

Research does not pay enough attention to providing ex-service personnel with opportunities to express their thoughts on the experiences of war, or investigate the specific needs for as well as types of services available after deployment as requested by ex-service personnel (Sharp, Pineros, Hsu, Starks & Sales, 2004). Qualitative research aims, then, to understand the meaning that individuals make of their experiences and a clear application of qualitative method of research and analysis (Bailey and Tilley, 2002), the challenges individuals face when those experiences are traumatic or disruptive, and, for service personnel, how those challenges may affect their personal wellbeing, their role in the home (and in society as a whole) after service (Faber, Willerton, Clymer, MacDermid & Weiss, 2008; Hoge, 2010). To argue for more qualitative research in general and systematic literature reviews of studies of those who are suffering from combat-related trauma in particular, is key to expanding our understanding of the effects of exposure to combat on service personnel in future conflicts, as well as the various challenges of integrating into civilian life (Kilshaw, 2004; Scannell-Desch et. al., 2010). That

very few studies have explored the rich stories of experiences in combat, the effect those experiences may have on the individual and how those stories are told to and interpreted by the researcher, presents new territory for the war researcher. Increasing evidence-based practices for veterans with psychological disorders (particularly with regards to new therapeutic programmes or interventions for combat-related trauma) may benefit from including an amalgamation of multiple findings across different research methodologies (Popay et al., 2006; Noyes et al., 2008; Karlin et al., 2010). Qualitative research methods can help with the assessment of how effective a treatment is for those with psychological issues. But understanding the challenges faced by military personnel with combat-related trauma using an evidence-based qualitative approach to assessing those interventions remains a challenge for researchers (Sharp et al., 2004).

Conclusion

The review explored qualitative research into the war experiences of military personnel to understand how psychological problems may or may not have impacted veteran's experiences. In the area of military psychology, particularly in research focused on personnel diagnosed with combat-related trauma, the experiences and voices of the participant in such military studies are lacking. The qualitative systematic review identified relevant qualitative articles and synthesized the data of those qualitative studies using an aggregation of explicit dominant themes. The participants in the studies included in this qualitative systematic review, shared in interviews their different experiences from different war cohorts and age generations. Themes were applied to the primary data and a thematic synthesis of the data collected from the studies, provided detail about the diversity and extreme challenges of combat service. Other methodological and clinical implications for the study of military personnel that may benefit from qualitative research are related to deeper exploration of war-zone exposure effects on quality of life issues

after service. The individual experience provides information that can be useful to researchers as well as the medical and psychological community, which provide more detail than larger cohort studies. An analysis of research data may also play a significant role in the understanding of experiences, future wellbeing needs of military personnel and how best to address their wellbeing concerns.

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Appendix 1: Qualitative Analysis Matrix: a collection of articles on military psychology which examine mental health of soldiers applying qualitative methodological analysis to and an interpretation of data

Author (s)	Shaw, M. E. and Hector, M. A.	Schok, M. L., Kleber, R. J. and Boeije, H. R.	Scannell-Desch, E. and Doherty, M. E.	Burnell, K. J., Coleman, P. G. and Hunt, N.	Kilshaw, S. M.
Title	Listening to military members returning from Iraq and/or Afghanistan: A phenomenological investigation	Men with a mission: Veterans' meanings of peacekeeping in Cambodia	Experiences of U.S. Military Nurses in the Iraq and Afghanistan wars, 2003-2009	Falklands War veteran's perceptions of social support and the reconciliation of traumatic memories	Friendly fire: The construction of Gulf War syndrome narratives
Year	2010	2010	2010	2006	2004
Publication	Professional Psychology, 41(2): 128-134	Journal of Loss and Trauma,15: 279-303	Journal of Nursing Scholarship, 42(1): 3-12	Aging and Mental Health, 10(3): 282-289	Anthropology and Medicine, 11(2): 149- 160
Abstract/ Search criteria (keyword search if available)	Experiences of military members Phenomenology Therapy	Veterans' meanings of peacekeeping experience Military performance Comradeship Perception of threat	War nursing military nursing	Social support Reconciliation of traumatic memories Meaningful personal narrative	Gulf War Syndrome, narrative Sense-making Reflexive re- interpretation Collective interpretation

Type(s) of Qualitative Analysis	Interpretative Phenomenological Analysis (IPA)	Thematic analysis	Phenomenology (Colaizzi's phenomenological method guided discovery)	Thematic analysis	Ethnographic [approach to data collection and analysis]
Sample themes explored	Being there Family Day-to-day basis Dangerous	No ordinary world Military performance Perceived threat	Deployment to war zone Remembrance of experience Combat stress	Comradeship Family support Social support	Uncertainty Symbolism and metaphor of GWS narratives
Appropriate background for inclusion	Combat experience in Iraq/Afghanistan Growing number of military personnel presenting psychological issues	Combat experience in Cambodia Traumatic event and search for meaning	Military nursing in theatre, personal gain from experience in Iraq conflict	Integration of trauma memories related to combat in Falklands War	Gulf war syndrome narrative Collective agreed illness narrative
Participant profile / sampling	US military personnel post-Iraq/Afghanistan service Targeted recruitment until saturation	Dutch peacekeepers Purposive sampling	US Military nurses served three years in Iraq/Afghan campaigns	Small sample of UK veterans of Falklands, currently in active service in UK Royal Marines	92 interviews (67 UK veterans) with Gulf War experience
Data collection	Interviews	interviews	interviews	interviews	interviews

Limitations	Narrative themes compares diagnosis group with non-diagnosis group positing that the differences in recurrent themes is justifiable criteria to make assumptions about group difference	Purposive sampling procedure decreases generalizability of findings. Findings could be due to other interpretations, however additional authors provided validity of interpretations related to the text	subjects were military nurses whose narrative of war was experienced through the treatment of soldiers wounded or fatally injured as a result of combat-exposure	Relied on research from WWII veterans and Korean War, very little research focused on young veterans	Gulf War Syndrome receives ongoing debate within medical and psychological community as to the etiology of disease. GWS sufferers differ in symptoms presented. Participant inclusion criteria was omitted from methods
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Quality Systematicity/ Transparency (Meyrick, 2006)	Theoretical grounding is clear. Sampling detail is provided. Group is targeted however recruitment reached saturation	Theoretical grounding is clear. Sampling detail is provided. Standard method of objectivity utilized with multiple authors and internal consensus of interpretation	Theoretical grounding is clear. Sampling detail is provided Standard method of objectivity utilized with multiple authors and consensus of interpretation External validation performed on data	Inclusion criteria is apparent, however small sample group not representative. Clear analytical framework provided. Method of objectivity was assessed using triangulation and internal validation	Theoretical grounding is clear. Sampling detail is provided. Group is targeted however recruitment reached saturation and included both GWS sufferers and well respondents who complained of somatic conditions related to war experience
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AUTHOR NOTE

Kim Gordon is a PhD research student, working on a doctoral thesis at the University of Portsmouth in psychological problems encountered by ex-military personnel with combat experience living in the United Kingdom, and the affects of these problems on their everyday lives. Prior to admission to the programme, she studied for a masters in Counselling Psychology at the California Institute of Integral Studies and received training in school-based cognitive behavioural intervention programmes in San Francisco, promoting the implementation of child and family support for improved academic performance.