

THE UNIVERSITY OF HULL

Transition and adjustment; personal and societal influences on the identity of
ex-military amputees

being a Thesis submitted in partial fulfilment
of the requirements for the degree of Doctor of Clinical Psychology
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by

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Overview

This thesis is split into three parts; a systematic literature review, an empirical research paper and a set of appendices.

Part one contains a systematic literature review of the factors which help or hinder military personnel adjusting to civilian life. Fifteen Articles published in the UK, USA and Canada were reviewed. The results are discussed in relation to one another and the psychological understanding of adjustment. The implications of the findings on clinical practice and future research are then discussed.

Part two is a piece of original qualitative research exploring the experiences of ex-military amputees. It aims to consider the social and personal perspectives which influenced their adjustment and identity. Five individuals were interviewed and their transcripts were analysed using narrative analysis. The clinical implications of the findings and suggestions for future research are then discussed. Ways to build more positive societal perspectives of ex-military amputees are also considered.

Part three contains a complete set of appendices, referenced throughout the previous two parts.

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Part One: Systematic Literature Review

This paper is written in the format ready for submission to the *Journal of Social and Clinical Psychology*. See Appendix A for Author Guidelines.

Running head: Factors affecting adjustment to civilian life

**A systematic literature review of the factors which affect the adjustment of
military personnel transitioning to civilian life**

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Abstract

Upon leaving the military individuals must adjust to civilian life. This review aims to explore the factors which may help or hinder their adjustment. Literature from PsycINFO, PsycARTICLES, Medline and Web of Science was systematically searched. Fifteen articles published in the UK, USA and Canada are included. Factors found to be associated with positive adjustment were supportive relationships, transferable skills and satisfying employment, a positive self-concept as a civilian, satisfaction with their location and feeling prepared for the transition. Barriers to adjusting were found to be societal perceptions, financial or mental health difficulties, early discharge from the military, serving in the army and experiencing high levels of combat. The association between rank, time, physical health and alcohol was unclear. This review highlighted a number of factors which should be considered, prior to, and during the transition to civilian life, in order to aid the adjustment of military personnel.

Key Words: Transition, Adjustment, Military, Civilian, Review

Introduction

With an estimated 26.4 million veterans in the US, and over three million veterans in the UK (Richardson & Waldrop, 2003; Royal British Legion, 2014), nearly 10% of the UK and US population transition from the military to civilian life. Morin (2011) found 72% of veterans experienced a smooth transition and 27% struggled. While 44% who served after 2001 reported a difficult adjustment, other research has suggested the prevalence of difficult adjustment varies between 25%-56% (MacLean et al., 2014; Sayer et al., 2010). Why Morin's participants struggled to adjust was not stated, however, other research found difficulties related to: relationships with family, friends

or non-military personnel, completing chores, driving dangerously and spiritual beliefs (Sayer et al., 2010). The UK army states this process should not be underestimated as the “*transition to civilian life tests most people*” (Connelly, n.d, p.4). They advise veterans to anticipate changes to their family life and allow time to adjust. They also expect individuals to feel lost or insecure. Similarly, the US army recognises that families may struggle to develop a role for the veteran upon their return (Veterans Affairs Healthcare, n.d). There are a number of differences between military and civilian life which can also make this transition difficult. Prior to joining the armed forces, all individuals must complete basic training. This training alters an individual’s initial response to threatening situations and teaches them to go towards danger, rather than using their automatic fight or flight responses. Aggressive and loud commands are given to train individuals to remain calm and to respond appropriately when confronted with loud sudden noises. Alongside this, individuals are given a uniform and a number and are seen as one of a group rather than individuals. Individuals are introduced to a clear hierarchical structure and are treated differently depending on their rank and status. There is also a clear career progression up the ranks should individuals wish to follow this. Employers in a civilian context still have a hierarchical structure, however, it is recognised that this is often very different as it is less defined and control is dispersed more evenly through the organisation (Hudson, n.d). Equally, when in the military an individual’s job security is higher than in the civilian world, but their freedom to choose a new job, go home to their family, or choose where they live is removed (“Military vs Civilian Life”, 2017). Individuals in the military live on a military base where they are provided with their meals, told when they will wear their uniforms and what they will do each day. This takes away the worry of paying

for their own accommodation and living expenses which civilians are required to pay for themselves. This also develops a very strong community and closeness which cannot be recreated in the civilian world. These differences mean individuals can struggle in the less structured civilian world. This shows transitioning from military to civilian life can be difficult and requires adjustment.

Adjustment and Transitions in Psychology

Transitions are an intrinsic part of psychological theory. Developmental models suggest social and emotional development involves the resolution of numerous conflicts and challenges (Erikson, 1950; Piaget, 1928). Systemic models suggest transitions can leave families or individuals vulnerable to difficulties, as individuals become dissatisfied with their circumstances and search for a new meaning (Keim, 2012). This may be particularly relevant for veterans as they seek to establish their role in the family. Transitions are viewed as important times in a person's life, but that individuals must adjust to prevent distress. Inevitably, serving personnel will return to civilian life. Understanding the process of adjustment, and how this can be facilitated could reduce the potential difficulties they and their families' experience.

Adjustment has been defined as "*a response to a change in the environment that allows an organism to become more suitably adapted*" (Sharpe & Curran, 2006, p.1154). Prior to adjustment, service personnel must first transition from a military to civilian environment. Following this, veterans then undergo a period of adjustment to civilian life.

A number of models have been proposed to explain this process. Although transitions are experienced throughout life, most of the literature focuses on adjustment to physical health conditions. Brennan (2001) argued that transitions challenge our

expectations or assumptions about the world, leading to emotional and psychological stress. This supports crisis theory, which suggests humans strive for a state of social and psychological equilibrium, and disruptions to this create distress (Caplan, 1964). Stress has been linked to the development or exacerbation of multiple physical health difficulties, from colds and asthma, to strokes and heart disease (Mohren, Swaen, Kant, Schayck, & Galama, 2005; Chen & Miller, 2007; Tsutsumi, Kayaba, Kario, & Ishikawa, 2009; Orth-Gomer et al., 2000). Brennan also discussed the increased likelihood of anxiety, as events that challenge our world view increase worries about potential future negative events. Consequently, difficult adjustment can have negative psychological and physical consequences.

Transitions and adjustment are often thought of as a process. Some propose linear stages, including immobilisation, depression, acceptance and internalisation, (Adams, Hayes, & Hopson, 1977). Contrastingly Stanton, Revenson, and Tennen (2007) suggested this may be too simplistic, as an individual's adjustment varies due to their circumstances. These models considered the process of adjustment and potential consequences, however they did not consider factors which may affect the process. Research has shown a person's religion, age, gender and cultural background can impact on their willingness to receive treatment, as well as affect their ability to adjust (Henderson & Primeaux, 1981; Kagawa-Singer & Wellisch, 2003; Sacks & Koppes, 1986; You & Lu, 2014). This highlights the importance of considering factors associated with adjustment.

Schlossberg (1981) proposed a model to encapsulate human adaptation to transitions during adulthood. She suggested the process of adaptation is influenced by the transition, and the person's perception of it, their environment, as well as the

individual's characteristics or background. The interplay between these factors influences the person's ability to adjust. Schlossberg also highlighted the importance of the person's perception of the transition, and its perceived difficulty, rather than the event alone. Equally, Wheaton (1990) suggested that the transition is not inherently stressful, but that the prior circumstances determine its impact. This implies that distress during the transition to civilian life could be predicted, prior to the transition occurring, provided relevant risk or protective factors were considered. This could allow more preventative support to be implemented.

Rationale for Review and Research Questions

Current reviews have focused on mental and physical health outcomes (Boman, 1982; Teachman & Tedrow, 2013; Whybrow, Jones, & Greenberg, 2015). Nevertheless, a more preventative approach could be adopted if the factors, prior to, and during the transition, were known. A review by Barry, Whiteman, and MacDermid Wadsworth (2014) focused on veterans enrolled in higher education. However, they are a small subset of the veteran population, and it is likely there are other adjustment difficulties experienced by transitioning veterans, which were not present in their review. To the best of the author's knowledge, a review of factors associated with adjustment, in association with participants' self-reported perceptions, has not been conducted. Some papers used proxy measures to suggest the presence of adjustment problems (Dutra, de Blank, Scheiderer, & Taft, 2012; Miller et al., 2012; Thompson et al., 2013). However, the adjustment literature demonstrates the importance of the person's appraisal of the event, and its link to the resultant stress or outcome, which these do not convey. This review aimed to explore the factors which help or hinder adjustment to civilian life upon leaving the military.

The research questions were:

- *What factors facilitate adjustment to civilian life?*
- *What factors hinder adjustment to civilian life?*

Method

Literature Search Strategy

Literature published up to February 2017 was searched systematically. Four databases, including relevant psychological and medical disciplines, as well as the wider research base, were searched: PsycINFO, PsycARTICLES, Medline and Web of Science.

Search terms were generated in accordance with the language used in relevant literature. The search terms used were: *(transition* OR reemployment OR adjust* OR exit OR leaver OR post-military OR reintegration OR retirement) N5 (veteran* OR military OR forces OR army OR navy OR "air force" OR marine* OR services OR personnel OR soldier*) AND (civilian* OR civvy)*. Further details about the literature search process and selection of articles is provided in Figure 1.

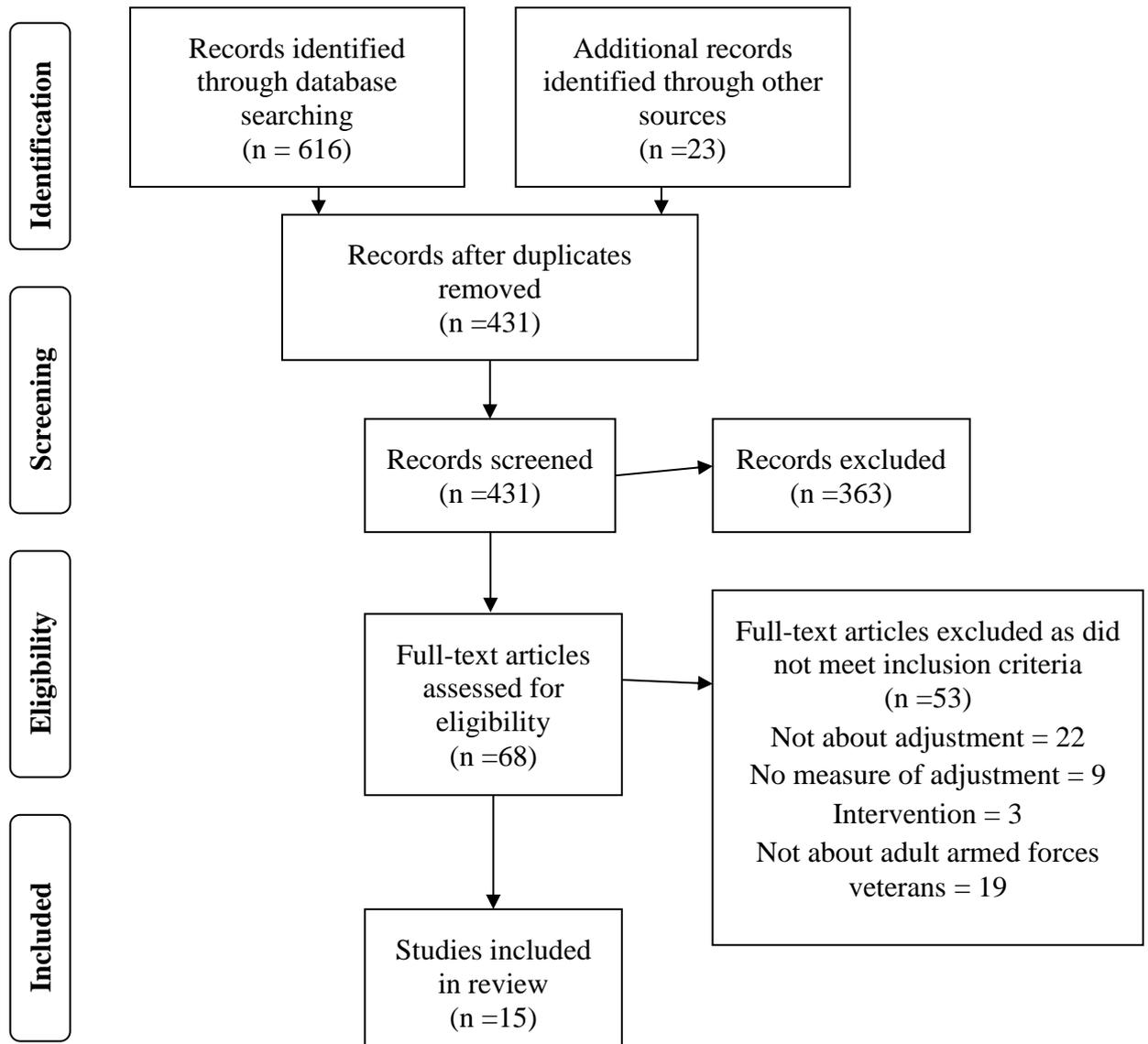


Figure 1. Prisma Flowdiagram showing selection of included articles. Based on Moher, Liberati, Tetzlaff, Altman, and Prisma group (2009).

Inclusion Criteria

Articles were included if they:

- Included at least one question specifically asking the veteran to self-report about their adjustment or transition to civilian life. Most commonly studies used a single question with a Likert Scale to assess how easy or difficult their participants found adjusting to civilian life e.g. “In general, how has the

adjustment to civilian life been since you were released from the Canadian Armed Forces?” 5-point Likert scale “very difficult,” “moderately difficult,” “neither difficult nor easy,” “moderately easy” and “very easy” (MacLean et al., 2014, p.1187).

- Were peer reviewed to increase the quality and rigor of included studies.
- Were written in English to allow the author to access and read the full paper.
- Concerned adult veterans, as adjustment challenges for youth or younger individuals leaving the armed forces will include different stressors.

Articles were excluded if they:

- Used proxy measures, such as suicide, PTSD or alcohol as indicators of adjustment.
- Were intervention studies as this review was interested in the factors which may affect adjustment and not specific interventions which may facilitate adjustment.
- Were review papers, policies and guidance, books or book chapters and discussion papers, as they did not contain original empirical research.
- Unpublished theses were also excluded as these would not have been peer reviewed.
- Articles only looking at reserves or the National Guard were also excluded; these individuals are more integrated into the civilian world, making their transitional experience different.

Data was systematically extracted from relevant articles using the data extraction tool (Appendix B).

Quality Assessment

Included articles used qualitative, quantitative and mixed methods. The Mixed Methods Appraisal Tool (MMAT; Pluye et al., 2011) was used as it was developed for use in systematic reviews of mixed methods studies. Percentage scores from relevant items indicate the methodological quality of each study. The MMAT is, however, still under development and only contains four questions for each methodology. The ratings were therefore used in conjunction with the National Institute for Health and Care Excellence (NICE; 2012a; 2012b) qualitative and quantitative checklists. The first four questions from the NICE qualitative checklist were added to the quantitative checklist. These questions asked about the design of the study, how the data was collected and if the purpose of the study was made clear. Two further questions from the qualitative checklist were used to assess quantitative studies; one asked whether the findings of the study were relevant to the aims and the other asked whether the study reported ethical approval and considerations. Questions specifically related to intervention allocation, testing and evaluation were excluded as the papers in this review were not intervention studies. For mixed methods studies, relevant questions from the qualitative and quantitative checklists were used. The MMAT and NICE checklists assessed the papers' design, methodology, results and conclusions. The MMAT has a clear scoring system, to allow all papers to be assessed against the same criteria. Alternatively the NICE checklists overall ratings were subjective and dependent on the researchers own thoughts or evaluations. Equally, as the NICE checklists had been adapted the reliability of the checklists used in this review was not known. The use of the MMAT allowed comparison across the studies, while the NICE checklists contained a broader number of questions and areas for consideration of the

methodological quality. An independent researcher quality-assessed four randomly selected papers; discrepancies between ratings were discussed and a consensus reached.

Data Analysis

A deductive approach was used to identify factors which affect adjustment to civilian life. Due to the heterogeneity of the studies included, data synthesis needed to allow for the use of different methodologies. Narrative synthesis was therefore used, as it allows the integration of diverse literature (Popay et al., 2006). This approach uses language to explain findings and summarise studies, but can also include statistics. In this review, statistics from the research were included alongside qualitative findings and linguistic summaries. This allowed a thorough explanation of the factors related to adjustment to civilian life. As instructed by Popay et al. (2006) all variables which were analysed alongside the adjustment variables were extracted from the included papers. Variables which were included across multiple studies were then grouped and organised to bring about the results sections. Related themes, with supporting quotes, from the included qualitative papers were also included in the synthesis of the results. The results are therefore organised into three sections: facilitators, barriers and factors that the literature was inconclusive about.

Results

A detailed summary of included articles is provided in Table 1. Eleven of the studies were conducted in the USA, two in Canada and two in the UK.

All studies included self-reported measures of adjustment. This predominantly consisted of a question asking the person to rate how easy, or difficult, their adjustment had been on a Likert scale. Other questions asked whether the individual

felt they had successfully transitioned, or whether they had experienced difficulties adjusting (“yes”/“no”). Only Taylor, Chultz, Spiegel, Morrison, and Greene (2007) considered smaller facets of adjustment such as control and meaning, as well as adjustment overall. To allow synthesis of the results, this review focused on the factors which affected overall adjustment. A total of 9,253 participants were involved in the studies, ranging from 11 (Brunger, Serrato, & Ogden, 2013) to 2,116 (Larson & Norman, 2014).

Five studies were qualitative; one used focus groups (Demers, 2013), three conducted interviews (Ahern et al., 2015; Brunger et al., 2013; Herman & Yarwood, 2014) and one used focus groups and interviews (Demers, 2011). Eight of the studies used questionnaires and analysed their data quantitatively. A range of validated questionnaires about physical and mental health were used, as well as demographic questionnaires. Two studies developed their own questionnaire (Black and Papile, 2010; Sayer et al., 2010). Two studies used mixed methods; one combined interviews with personality questionnaires (Strayer & Ellenhorn, 1975), while another used a questionnaire with a qualitative response box (Schonfeld et al., 2015).

Quality Assessment

Overall, there appeared to be good agreement between the MMAT scores and the NICE checklist ratings. For the papers which scored lower, they appeared to include less detail about what they had done, making it hard to know if their analysis was reliable. Equally, Black and Papile (2010) developed their own questionnaire, with the pilot comprising three people assessing its readability. The validity of their questionnaire, compared to other measures, does not appear to have been assessed. The qualitative papers consistently scored low in areas asking about the role of the

researcher and the impact of context on the results. In the mixed studies, the richness of the qualitative data appeared to be lower than other studies, though this may be because its purpose was to support the quantitative data. The quantitative papers predominantly gained lower ratings on questions regarding the validity of the measures used, and the generalisability of their results to the wider veteran population.

Table 1: Summary of included studies

Authors/ Country	Aim	Sample	Methodology	Measures	Results	MMAT Score	NICE Rating
Ahern et al 2015 (USA)	Transition challenges and approaches to reconnection	Purposive sample (n=24)	Qualitative: inductive thematic analysis	Semi-structured interviews	Facilitators: navigator, become ambassador, time. Themes: military as family, normal as alien, search for new normal.	75%	+
Black and Papile 2010 (Canada)	Explore issues faced by veterans	Opportunity sample (n=216)	Quantitative: descriptive statistics	Demographics. Transition experiences - Likert scale	Facilitators: satisfying work, mental health, family, relationship with spouse. Barriers: struggles with friendships and family, health declined.	25%	-
Brunger, Serrato, Ogden, 2013 (UK)	Barriers or facilitators to re-employment	Opportunity sample (n=11)	Qualitative: IPA	Semi-structured interviews	Facilitators: time Barriers: “weak” if help seek, stoicism/resilience, feeling of reduced self-efficacy Themes: loss of jobs, community, purpose. Feel isolated, variance in how skills are used, loss of self-identity.	100%	+

Factors affecting adjustment to civilian life

Authors/ Country	Aim	Sample	Methodology	Measures	Results	MMAT Score	NICE Rating
Demers, 2011 (USA)	Explore lived experiences of veterans transition	Purposive sampling (n=45)	Qualitative: developed themes, methodology unclear	Focus groups. Semi-structured interviews.	Themes: deploying to war, coming home Barriers: lack of respect for civilians, feeling different.	50%	+
Demers, 2013 (USA)	Narratives; identity and reintegration	Opportunity sample (n=17)	Qualitative: hermeneutic inquiry	Focus groups	Themes: becoming a soldier, fighting 2 wars. Coming home – “dirty bombs”, mourning who I was, questioning who I am, composing who I am. Narratives offer resolution.	75%	+
Fuller, Redfering 1976 (USA)	Explore the link between rank, time and pre-retirement planning on adjustment.	Opportunity sample officers (n=372) enlisted personnel (n=141)	Quantitative: three factor analysis of variance of unequal groups	Demographics, 10 questions about retirement planning, 12 about adjustment.	Facilitator: retirement planning. No effect of rank or time.	25%	-

Factors affecting adjustment to civilian life

Authors/ Country	Aim	Sample	Methodology	Measures	Results	MMAT Score	NICE Rating
Herman, Yarwood 2014 (UK)	Explore challenges faced by those deemed to have successfully transitioned to civilian life.	Purposive sample and snowballing (n=27)	Qualitative: methodology unclear	Interviews	Facilitators: links to civilian society, connect with others. Themes: sense of loss, need to let go, sense of continuity.	25%	-
Larson, Norman 2014 (USA)	Identify risk or protective factors associated with functional impairment in veterans	Opportunity sample (n=2116)	Quantitative: correlations and odds ratios	Demographics, combat exposure, resilience, social support, substance use, pain, depression, PTSD. Time 2: finances, work, mental health, readjustment.	Facilitators: social support, resilience. Barriers: pain, PTSD, alcohol misuse, combat exposure, lower rank, reason for separation.	50%	+
MacLean et al 2014 (Canada)	Identify factors associated with difficult adjustment	Cross-sectional study data (n=3154)	Quantitative: binary logistic regression	Adjustment to civilian life questionnaire. Demographics, health and disability	Facilitators: high social support, work, good mental health, money Barriers: lower rank, medical/involuntary release, employment status, 2+ deployments.	75%	+

Factors affecting adjustment to civilian life

Authors/ Country	Aim	Sample	Methodology	Measures	Results	MMAT Score	NICE Rating
O'Neill, Fontaine 1973 (USA)	Assess effectiveness of military rehabilitation programme	Random sample (n=347)	Quantitative: descriptive statistics	Questionnaire	Barriers: served in combat, served in marines or army, civilian society, non-transferable skills.	50%	-
Sayer et al 2010 (USA)	Describe prevalence and types of community reintegration problems among Iraq/Afghanistan veterans.	Stratified sample (n=1226)	Quantitative: descriptive statistics, stratified logistic regression and odds ratio's	Developed by researchers. Overall difficulty adjusting. Problems in functional areas. Problems since returning home. Mental and physical health. Services they would like to receive. Use of internet. PTSD. Alcohol/drugs.	Barriers: attitude/belief, finance/logistics, PTSD.	100%	+

Factors affecting adjustment to civilian life

Authors/ Country	Aim	Sample	Methodology	Measures	Results	MMAT Score	NICE Rating
Schonfeld et al 2015 (USA)	Effect of previous military experience on adjustment to college life.	Quota sample (n=173)	Mixed: questionnaire and description of adjustment issues	Demographics, achievements at college, adjustment, PHQ-9, VR-12, ASSIST	Barriers: PTSD, mental health, physical injury, Categories of difficulties: attitudes about civilians or other students, difficulties concentrating/studying, difficulties with benefits or scheduled classes, difficulties with social adjustment, emotional problems.	50%	+
Spiegel, Shultz 2003 (USA)	To see if preretirement planning, knowledge, skills and abilities affected retirement satisfaction and adjustment of retired naval officers.	Subset of larger study (n=672)	Quantitative: sequential and hierarchical regression	T1: Officer Career Questionnaire. T2: Retirement from Navy Life Survey. Demographics.	Facilitators: preparedness and transferability of skills.	50%	+
Strayer, Ellenhorn 1975 (USA)	Assess the links between personality and attitude on adjustment.	Radom sampling (n=40)	Mixed; Correlations and interviews	California F Scale Internal-External Control Scale Sentence completion Test Structured Interviews	Barriers: Combat experience, low goal orientation, high hostility, positive towards war protest movement, guilt, poor self- concept, high intraception, depression.	50%	+

Factors affecting adjustment to civilian life

Authors/ Country	Aim	Sample	Methodology	Measures	Results	MMAT Score	NICE Rating
Taylor et al 2007 (USA)	Link occupational attachment and met expectations to retirement	Subset of larger study (N=672)	Quantitative: correlations and regression	T1: Officer Career Questionnaire. Occupational attachment T2: Retirement from Navy Life Questionnaire. The Adjustment in General Measure.	Facilitators: location, attachment to navy	75%	+

Facilitators

Support/relationships

Black and Papile (2010) found 18.9% of those who had successfully transitioned perceived family as the most important factor, 16.8% said it was their relationship with their spouse and 16% felt it would have been easier if they had more people to talk to. They conducted their survey online and consider the impact of the so called 'digital divide' and bias it might create in their sample. As this was only a survey statistical analysis of the data was not conducted making their implications for this review limited. Other papers also showed low social support increased reported difficult adjustment (Larson & Norman, 2014; MacLean et al., 2014). Qualitative reports demonstrated difficulties with "*social adjustment*", "*creating a new network of friends*", "*feeling of isolation*" and loss of "*camaraderie*" (Brunger et al., 2013, p.92; Schonfeld et al., 2015, p.433). Some felt civilians "*won't really grasp what's going on*" (Ahern et al., 2015, p.5), but gratefully received support from individuals who had already transitioned, referred to as "*navigators*" (Ahern et al., 2015, p.7). These papers showed close relationships to family and partners can facilitate adjustment. Contact with ex-military personnel who have already adjusted was also beneficial.

Employment

Some veterans described struggling to adjust to civilian life due to the differences in job specifications stating:

"if you can't find me a job, then I doubt I can find me a job. You're the Job Centre" (Brunger et al., 2013, p.92)

"only training I had was in navigation and standing watch on board ships. Jobs requesting these specifications were few" (O'Neill & Fontaine, 1973, p.154).

Likewise, Spiegel and Shultz (2003) found that, for up to two years following leaving the military, the transferability of veterans' skills had a moderate impact on adjustment ($f^2=.132$, $p<.001$). Strayer and Ellenhorn (1975) found no significant correlation between employment and adjustment problems, whereas MacLean et al. (2014) found employed veterans were less likely to report difficult adjustment. Furthermore, the percentage of veterans satisfied with their job, that reported difficult adjustment, was significantly lower than the average for their study ($p<.05$). The differing results may be due to MacLean et al. (2014) focusing on Canadian veterans who served from 1998-2007, whereas Strayer and Ellenhorn (1975) looked exclusively at Vietnam War veterans in the USA. These studies suggest employment alone may not facilitate adjustment, but having transferable skills and being satisfied at work can.

Self-concept

Identity changes were commonly reported in the qualitative literature, as participants lost a sense of importance or direction (Brunger et al., 2013; Demers, 2011; Herman & Yarwood, 2014):

“I went from being special in my field ... to being frighteningly devoid of identity” (Demers, 2013, p.503)

Being able to accept the loss of one's former identity and build a new self-concept appeared to facilitate adjustment. Likewise, a positive attitude towards oneself has been found to aid adjustment (Strayer & Ellenhorn, 1975). This suggests veterans who are able to perceive themselves more positively appear to adjust easier.

Location

Location also proved a factor in adjustment. Some chose their location based on family support, while others felt the location itself bore more importance:

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"We have got no family ties here at all actually. It was just where we thought would be the best place to live." (Herman & Yarwood, 2014, p.12)

They also found the transition was easier if individuals had already bought an off-base property. Equally, Taylor et al. (2007) found satisfaction with their location prior to retirement significantly increased positive adjustment ($p < .05$). Despite this study being published more recently their data was not collected by them and was collected between 1981 and 1989. It is also unclear from the paper how the data was collected and where or how participants were recruited; making the generalisability and validity of this study difficult to decipher. This suggests the choice of location, based on what is important to the individual, can increase adjustment to civilian life.

Preparedness and expectations

Planning ahead appeared to facilitate adjustment (Fuller & Redfering, 1976; Spiegel & Shultz, 2003). O'Neill and Fontaine (1973) found 75% of participants wanted a programme of orientation prior to discharge, which is now provided by the military. Ahern et al. (2015) however, found that veterans felt the military did not prepare them well enough for release. In particular, some individuals were not informed of the class designed to facilitate the transition. This shows that, although planning is important for adjustment, some individuals still felt underprepared.

Barriers

Society

Civilian societal perceptions appeared to affect adjustment, particularly the differences between civilian and military life. Participants described civilian life as "*surreal*" or similar to "*landing on Mars*" (Demers, 2011, p.169), stating "*everyone is out for themselves*", "*civilian life was fast*", or that "*civilians suck*" (Brunger et al., 2013, p.92; O'Neill & Fontaine, 1973, p.154; Schonfeld et al., 2015, p.433).

O'Neill and Fontaine (1973) offered some insight into potential difficulties and adjustment, but gave limited detail regarding the contents of their questionnaire, or how they conducted their analysis, making it difficult to know how rigorous or reliable their findings were.

Civilians not understanding military life also created a barrier. Black and Papile (2010) found 28.4% of participants felt it would have been easier if civilians had a better understanding of military life. Similarly, one of Demers (2011) themes was 'No one understands us' with one participant stating:

"they don't understand the military concept, and it's hard to blend in"
(p.170)

Herman and Yarwood (2014) mentioned the importance of links to civilians through schools, societies and churches, but provided no quotes to support this. Civilians not understanding the differences in military life appeared to detrimentally affect adjustment. Nonetheless, individuals' willingness to connect with civilians was also important.

Mental Health

Mental health was found to have a significant impact on adjustment (MacLean et al., 2014; Schonfeld et al., 2015). In Black and Papile (2010), 20% felt mental health was the most important factor for a successful transition. It is not clear whether this meant they had good mental health, or they had received support for their mental health. Some studies looked at post-traumatic stress disorder (PTSD). Larson and Norman (2014) found PTSD prior to (0.4, $p < .001$) and following the transition (0.58, $p < .001$) was the strongest predictor of adjustment difficulties. Moreover, the results from Schonfeld et al. (2015) showed a moderate effect of a diagnosis of PTSD on

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adjustment difficulties (0.7, $p < .005$). Finally, Sayer et al. (2010) found those who had probable PTSD reported significantly more adjustment problems ($p < .001$).

Strayer and Ellenhorn (1975) found adjustment problems positively correlated to depression (0.68 $p < .05$). However, their question about adjustment was answered on a four point Likert scale with four being: “*Most of the time I experience severe depression and/or anxiety; I can't fit back into civilian life*” (p.87). The circularity in the question makes their finding less valid. These studies showed mental health difficulties prior to the transition can increase difficulties adjusting. Mental health problems during the transition have also been related to difficult adjustment, however it is unclear whether poorer mental health causes difficulties in adjusting, or if difficulties in adjusting causes poorer mental health.

Medical/involuntary discharge

The literature also considered the reason for release and its impact on adjustment. MacLean et al. (2014) found individuals who were medically discharged reported significantly higher levels of difficult adjustment than the average across their study (49.6%, $p < .05$); while a significantly lower percentage of individuals who were released voluntarily (16.4%), or at retirement age (12.1%), experienced difficulties adjusting ($p < .05$). No significant difference was found for those who were involuntarily released, whereas Herman and Yarwood (2014) found some individuals struggled to adjust due to reluctance to leaving the military:

“I was desperate to stay... that did affect the whole psychology of it” (p.14)

Although their data suggests the reason for someone leaving the military impacts on their adjustment, they do not detail their method of analysis, or the implications of their findings. Larson and Norman (2014) also found a small correlation between early discharge and adjustment difficulties ($r = .10$, $p < .05$). Though there are some

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differences between the studies, all showed links between the circumstances under which someone leaves the military and difficult adjustment.

Branch of Service

The force which veterans served in can affect adjustment. O'Neill and Fontaine (1973) found 78% of former marines, 70% of those leaving the army, and 64% of air force veterans experienced difficulty adjusting. Contrastingly, 20% in the navy reported difficulties. MacLean et al. (2014) found the prevalence of difficult adjustment was significantly higher in army veterans (30.9%, $p < .05$), when compared to the average for their study, but significantly lower for air force veterans (20.0%, $p < .05$). There was no difference for those who had been in the navy. Some individuals' service branch was unknown, which may have affected the results. The 40-year gap between these studies could also have impacted their findings, due to the changing demands on different branches of service. Serving in the army, however, appeared to increase difficulties adjusting.

Combat Exposure

MacLean et al. (2014) found a significantly higher percentage of individuals who were deployed two or three times reported difficulties adjusting, when compared to the average prevalence of difficult adjustment ($p < .05$). Their paper used data from a national study which used stratified random sampling to identify participants, suggesting their results are likely to be generalizable to the rest of the Canadian population. Conversely, the use of percentages to express their results makes it harder to conclude whether there is a predictive relationship between combat exposure and difficult adjustment. Larson and Norman (2014) also found a small positive correlation between difficult adjustment and greater combat exposure ($r = .14$, $p < .01$), but not the number of deployments. To measure combat exposure, individuals rated how

frequently they had experienced 18 potentially traumatic incidents. Strayer and Ellenhorn (1975) categorised individuals combat experience as “*light*” “*moderate*” or “*heavy*” (p.84), however did not detail how this was done. They found a medium positive correlation between adjustment problems and combat experience ($r=.43$ $p<.05$). Therefore, greater combat exposure can negatively affect adjustment.

Money

Black and Papile (2010) found that 28.4% of veterans, who identified as having successfully transitioned to civilian life, said it would have been facilitated by having more money. This was supported by MacLean et al. (2014) who found, both those who are “*neither satisfied nor dissatisfied*” (36.3%, p.1191), and those who are “*dissatisfied or very dissatisfied*” (54.8%, p.1191) with their finances, reported significantly higher levels of difficult adjustment, than the average in their study ($p<.05$). They also found a significantly higher percentage of those on low incomes reported adjustment problems (37.4%, $p<.05$). Although only two studies looked at the impact of money, their findings indicate that money may negatively affect adjustment.

Inconclusive

Rank

Some studies considered the effect of rank on adjustment. Fuller and Redfering (1976) found no significant effect of rank on self-reported adjustment. They used officers and recruits (individuals who are yet to complete their basic training) to compare the effect of rank. Recent research found the percentage of officers and recruits who experience difficulties in adjusting is significantly lower than average ($p<.05$; MacLean et al., 2014), thereby suggesting their sample may not have been diverse enough. Junior non-commissioned service personnel, however, reported significantly more adjustment difficulties ($p<.05$; MacLean et al., 2014). Larson and Norman (2014) found a small

negative correlation between being an officer and experiencing problems in adjusting ($r=-.10, p<.05$). Though recruits may adjust more easily, having not experienced combat, why officers adjust easier is unclear. Though the research is not conclusive, there is some evidence that officers and recruits may adjust more easily than those in other ranks.

Time

Multiple studies explored the association between adjustment and time. Qualitative reports suggest adjustment becomes easier with time (Ahern et al., 2015; Brunger et al., 2013). Ahern et al. (2015) used thematic analysis to analyse transcriptions of semi-structured interviews. They clearly describe the systematic nature of the analysis, conferring between two authors, theoretical underpinning for their approach and the implications of the study. Thus making their results more likely to be defensible and rigorous. Contrastingly, quantitative papers found no significant effect of time on adjustment (Fuller & Redfering, 1976; MacLean et al., 2014). Spiegel and Shultz (2003) argue the effect of transferability and preparedness decreases over time, suggesting adjustment becomes easier. Their results reflect this to an extent, however the effect of preparedness decreased from $f^2=.238$ ($p<.05$) at year 1, to $f^2=.234$ ($p<.001$) at year 2, showing this trend was not consistent. Some individuals may find that time facilitates their adjustment, however, the literature was inconclusive about its direct link.

Physical health

Poor physical health can negatively affect veterans' adjustment; however, this varies across the literature. A small number (5.8%) of participants in Black and Papile (2010) felt their physical health status impacted on adjustment. Larson and Norman (2014) found a small correlation between pain and difficult adjustment ($r=.23, p<.001$).

Conversely, Schonfeld et al. (2015) demonstrated no significant effect of physical health on adjustment difficulties ($g=-.26$, $p=.12$). They did however, find a significant effect of being hospitalised for physical injury, during military service ($g=.53$, $p=.01$), but not for an injury which induced temporary unconsciousness ($g=.38$, $p=.17$).

Alcohol

Alcohol use was also considered. Ahern et al. (2015) argued those who continued to struggle beyond their first year had increased substance misuse, but provided no quotes to demonstrate this. Larson and Norman (2014) found poorer adjustment correlates to alcohol use prior to ($r=.15$, $p<.01$) and after the transition ($r=.21$, $p<.001$). Alternatively, MacLean et al. (2014) found no significant impact of alcohol use on adjustment. Larson and Norman (2014) conducted a high number of statistical tests increasing the likelihood of finding a significant result, which could account for the differing results. Again, the literature seemed inconclusive about the effect of alcohol on adjustment, but there is limited evidence to suggest it has a large impact.

Discussion

The results of this review highlighted a number of factors associated with adjustment. Those who had greater connections to civilian life and social support, were satisfied with their job, and had a positive self-concept adjusted more easily. Although some studies treated mental health as one variable, PTSD was commonly the strongest predictor of adjustment difficulties. Other factors which hindered adjustment were: differences between the military and civilian life, greater combat exposure, medical discharge, serving in the army and dissatisfaction with finances. The association between rank, time, physical health and alcohol was unclear due to conflicting evidence.

Consistent with previous research (Boinon et al., 2014; Glynn, 2013; Schlossberg, 1981; Link & Palinkas, 2013), the results showed social support was important to facilitate adjustment. Equally, veterans not feeling supported by society, due to civilians not understanding military life and veterans having negative perceptions of civilians, created a barrier to adjustment. This highlights the importance of close relationships and societal integration. Gribble et al. (2012) explored the UK public's attitude towards the armed forces and aimed to gauge support for veterans. They stated:

“The public is overwhelmingly supportive of the men and women who have served in Iraq and Afghanistan” (p.150)

This implied that the UK public are open to supporting veterans; however, this review found veterans experienced a barrier between themselves and civilians. Community and clinical psychology could therefore be important in promoting societal awareness of military life and the challenges in transitioning. Further psychoeducation around the potential difficulties in adjusting could also be beneficial; while community interventions could increase integration and reduce strain on other services. Mikal, Rice, Abeyta, and DeVilbiss (2013) found that although individuals need face-to-face support during transitions, computer-mediated social support can increase connectedness. Therefore, connecting individuals online could further facilitate adjustment, without requiring extra resources.

Veterans being prepared for discharge, and planning where they were going to live, also facilitated adjustment. As predicted by crisis theory (Caplan, 1964), this provided some stability. Despite the military introducing extra support, some individuals did not feel prepared enough. Suggesting further planning support from the military could be needed. Thorough assessment of veterans' needs and potential difficulties could also

help prevent difficulties in adjusting. Psychologists could develop formulations for individuals who appear to be at high risk of experiencing difficulties, in order to promote planning and preventative interventions.

The biggest barrier to adjustment was mental health, with PTSD showing the largest effect size. This highlights the importance of mental health support for ex-military personnel. Veterans with PTSD have reported significantly more barriers to accessing mental health services than those who do not have a diagnosed mental health condition (Hoge et al., 2004; Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009).

Consequently, destigmatising mental health and increasing accessibility of services appears important to facilitate adjustment. This could be done through increasing awareness and community interventions to help individuals feel more supported.

Mental health difficulties, prior to transition, increased the likelihood of poor adjustment, suggesting mental health has an impact. However, the causal link between mental health and poor adjustment, following the transition, remains unclear.

Barriers to adjustment were commonly due to veterans' experiences in the military. In particular, those who were discharged early, had served in the army, or had repeated combat exposure struggled. This demonstrates the possibility of identifying those at higher risk of experiencing difficulties prior to discharge. Ashcroft (2014) suggested all veterans who have completed basic training, should receive the full resettlement package, to facilitate adjustment in those who are discharged early. Extra support for those who served in the army, or were exposed to greater levels of combat, is also needed.

Equally, repeated exposure to trauma can disrupt a person's self-concept and relationships, giving rise to a potential new diagnosis of complex PTSD (Maercker et al., 2013). As the individuals' self-concept and social support was particularly

important to facilitate adjustment, those supporting veterans need to consider complex PTSD and its potential impact on adjustment. Guidelines for the treatment of complex PTSD have recently been developed to aid services (McFetridge et al., 2017). The pro forma for assessments could be useful for clinicians to help identify those who may need further support. Psychoeducation around the importance of maintaining relationships and the adjustment of their self-concept, for individuals who have experienced a high level of combat, could also be beneficial.

There were a high number of inconclusive results and discrepancies within the literature, which could reflect the individual nature of adjustment. Schlossberg (1981) suggested the outcome of adjustment varies depending on the combination of different factors and the individual's interpretation of the event. Although all veterans face the same transition, the outcomes may depend on the interplay between the factors.

Equally, many of the factors identified are intrinsically linked. Recent research has found the duration of PTSD symptoms in veterans was predictive of resultant stress in spouses (Ahmadi, Azampoor-Afshar, Karami, & Mokhtari, 2011), which could affect the social support they receive. Although this review aimed to highlight the needs of veterans as a whole, it has also shown the individual nature of adjustment and resultant difficulties. These factors are important to consider, as well as the individual's needs.

Formulations could contain the possible factors which may influence a veteran's adjustment, as well as the individual's circumstances. This could guide the support they receive and encourage veterans to plan for potential difficulties.

The armed forces also have a clear set of values which may help or hinder individuals adjusting. Their values are 'Courage, Discipline, Respect for Others, Integrity, Loyalty and Selfless Commitment' ("The Army Leadership Code", 2015, p.4). Equally, as individuals are constantly living and working together the army develops extremely

close bonds between individuals and works as a team to achieve their goals. As these values become engrained in individuals during their military service it is likely these will be used during their transition. These values can therefore aid individuals in their ability to believe in themselves and in driving them to succeed and achieve outside of the military environment. Conversely, individuals also seem to struggle as the civilian world is more individualistic than the army where they had a collective purpose and goal (Brunger et al., 2013). Their experiences in the army have shown them the power of team work and close bonds which are developed and maintained through living collectively. Direct links are made between an individual's values and their motivation, how they will act and how they will be perceived by others. Comparison to those who do not have the same military values is therefore highly likely as they have experienced how important and successful the army values are. The armed forces training therefore gives individuals a number of skills and values to help them survive and succeed which can be applied in a civilian context. However, because the civilian world does not operate or enforce those values on individuals, veterans may struggle to continue to apply them in a constructive way.

Future research

Future research could explore the relative importance of different factors over time. Further longitudinal research is also needed to try and disentangle the factors which may be causing adjustment difficulties and outcomes of difficult adjustment. In particular, the relationship between mental health and difficult adjustment could be researched further. Models and interventions for specific populations also aids prevention (Brennan, 2001; Williams & Flora, 1995). Research to further conceptualise the adjustment process experienced by veterans could contribute to the development of a model and more preventative interventions. Only one study

exclusively included participants who had adjusted successfully. Understanding positive adjustment may help to find ways to support those who struggle. Finally, research into the development of a universal measure of adjustment, which encompasses adjustment in a number of areas across an individual's life, is needed.

Strengths and Limitations

This review was the first of its kind to examine the factors associated with adjustment to civilian life and promote preventative interventions. There was however a paucity of research considering veterans' perceptions of their adjustment. As there were few papers where this was the main focus, it is likely that other relevant papers have been missed. Equally, this review focused on the factors associated with adjustment; however, their link to psychological variables was uncertain. As the causality is unclear, factors are considered as both predictors and indicators of difficult adjustment (Sharpe & Curran, 2006). The circularity of the results in this review was reduced by only including studies which asked directly about adjustment.

Methodological Quality

The quality of included studies was highly variable. The reliability and generalisability of the results from the studies was limited due to the lack of a validated measure to assess adjustment. Most papers only considered adjustment as one variable, which may not have captured all elements of adjustment. There is also no "comprehensive" data on UK veterans from which to base sampling, making it hard to determine how representative the samples were and therefore how generalisable the results are (Herman & Yarwood, 2014, pg.9).

Factors which could affect adjustment are also extremely broad; consequently, studies were unable to examine all possible factors, meaning some indicators may have been missed. Conversely, those who included a larger range of factors conducted a higher

number of statistical tests, which increased the likelihood of a significant result.

Previous research showed demographics such as age, gender and culture can affect adjustment (Henderson & Primeaux, 1981; Kagawa-Singer & Wellisch, 2003; Sacks & Koppes, 1986; You & Lu, 2014). Not enough of the included studies considered the direct link between the demographic information of participants and measures of adjustment for these to be included in this review. There were also discrepancies between the findings of qualitative and quantitative papers. This could be due to differences in sample size, or methodological differences, as the qualitative papers cannot explore the factors' direct link to adjustment, or state their overall impact on participants. The qualitative studies also rarely considered the wider context in which the research was conducted, or the influence of the researcher, which may have created discrepancies.

The results from studies were variable. This in part could be due to the varying samples, methodologies and time points in which the included studies collected their data. Due to these differences the results from this review are therefore tentative and offer guidance as to what factors should be considered when helping veterans to transition back in civilian life. These factors are not exhaustive and must also be considered in relation to the individuals personal circumstances.

Conclusion

This review highlighted a number of factors which may affect veterans adjusting to civilian life. Despite the limitations of the literature and this review, helping veterans integrate into society and considering potential barriers prior to the transition could help to alleviate adjustment difficulties. The results provide information to aid organisations supporting service personnel to adjust to civilian life.

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None

References

- Adams, J. D., Hayes, J., & Hopson, B. (1977). *Transition: Understanding & managing personal change*. New York: Allandheld & Schram.
- Ahern, J., Worthen, M., Masters, J., Lippman, S. A., Ozer, E. J., & Moos, R. (2015). The challenges of Afghanistan and Iraq veterans' transition from military to civilian life and approaches to reconnection. *Plos One*, *10*(7), e0128599.
- Ahmadi, K., Azampoor-Afshar, S., Karami, G., & Mokhtari, A. (2011). The association of veterans' PTSD with secondary trauma stress among veterans' spouses. *Journal of Aggression, Maltreatment & Trauma*, *20*(6), 636-644.
- Ashcroft, M. (2014). *The veterans' transition review*. Retrieved from <http://www.veteranstransition.co.uk/vtrreport.pdf>.
- Barry, A. E., Whiteman, S. D., & MacDermid Wadsworth, S. (2014). Student service members/veterans in higher education: A systematic review. *Journal of Student Affairs Research and Practice*, *51*(1), 30-42.
- Black, T. G., & Papile, C. (2010). Making it on civvy street: An online survey of Canadian veterans in transition. *Canadian Journal of Counselling and Psychotherapy*, *44*(4), 383-401.
- Boinon, D., Sultan, S., Charles, C., Stulz, A., Guillemeau, C., Delalogue, S., & Dauchy, S. (2014). Changes in psychological adjustment over the course of treatment

Factors affecting adjustment to civilian life
for breast cancer: The predictive role of social sharing and social support.

Psycho-oncology, 23(3), 291-298.

Boman, B. (1982). The vietnam veteran ten years on. *Australian and New Zealand*

Journal of Psychiatry, 16(3), 107-127.

Brennan, J. (2001). Adjustment to cancer—coping or personal transition? *Psycho*

oncology, 10(1), 1-18.

Brunger, H., Serrato, J., & Ogden, J. (2013). 'No man's land': The transition to civilian

life. *Journal of Aggression, Conflict and Peace Research*, 5(2), 86-100.

Caplan, G. (1964). *Principles of Preventive Psychiatry*. New York: Basic Books.

Chen, E., & Miller, G. E. (2007). Stress and inflammation in exacerbations of asthma.

Brain, Behavior, and Immunity, 21(8), 993-999.

Connelly, V. (n.d). *Transition to civilian life*. Retrieved from

https://www.army.mod.uk/documents/general/Transition_Information_Sheet_2_-_The_Emotional_Pathway.pdf

Demers, A. (2011). When veterans return: The role of community in reintegration.

Journal of Loss and Trauma, 16(2), 160-179.

Demers, A. L. (2013). From death to life female veterans, identity negotiation, and

reintegration into society. *Journal of Humanistic Psychology*, 53(4), 489-515.

Dutra, L., de Blank, G., Scheiderer, E., & Taft, C. (2012). Correlates of female

veterans' perpetration of relationship aggression. *Psychological Trauma:*

Theory, Research, Practice, and Policy, 4(3), 323-329.

Erikson, E. H. (1950). *Childhood and society*. New York: Norton.

Fuller, R. L., & Redfering, D. L. (1976). Effects of preretirement planning on the

retirement adjustment of military personnel. *Sociology of Work and*

Occupations, 3(4), 479-487.

- Glynn, S. M. (2013). Family-centered care to promote successful community reintegration after war: It takes a nation. *Clinical Child and Family Psychology Review, 16*(4), 410-414.
- Gribble, R., Park, A., Clergy, E., Curtice, J., Phillips, M., & Utting, D. (2012). *The UK's Armed Forces: public support for the troops but not their missions?* Retrieved from http://www.bsa.natcen.ac.uk/media/1150/bsa29_armed_forces.pdf
- Henderson, G., & Primeaux, M. (1981). *Transcultural Health Care*. Menlo Park, California: Addison-Wesley.
- Herman, A., & Yarwood, R. (2014). From services to civilian: The geographies of veterans' post-military lives. *Geoforum, 53*, 41-50.
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine, 351*(1), 13-22.
- Hudson, D. (n.d). *Understanding How Military and Civilian Cultures Differ*. Retrieved from <https://www.job-hunt.org/veterans-job-search/military-vs-civilian-cultures.shtml>
- Kagawa-Singer, M., & Wellisch, D. K. (2003). Breast cancer patients' perceptions of their husbands' support in a cross-cultural context. *Psycho-oncology, 12*(1), 24-37.
- Keim, J. (2012). Strategic family therapy. In *Family Therapy Review: Contrasting Contemporary Models*, (1st ed., pp.89-93). New York: Routledge.
- Larson, G. E., & Norman, S. B. (2014). Prospective prediction of functional difficulties among recently separated veterans. *Journal of Rehabilitation Research and Development, 51*(3), 415-427.

- Link, P. E., & Palinkas, L. A. (2013). Long-term trajectories and service needs for military families. *Clinical Child and Family Psychology Review, 16*(4), 376-393.
- MacLean, M. B., Van Til, L., Thompson, J. M., Sweet, J., Poirier, A., Sudom, K., & Pedlar, D. J. (2014). Postmilitary adjustment to civilian life: Potential risks and protective factors. *Physical Therapy, 94*(8), 1186-1195.
- Maercker, A., Brewin, C. R., Bryant, R. A., Cloitre, M., Ommeren, M., Jones, L. M., et al. (2013). Diagnosis and classification of disorders specifically associated with stress: Proposals for ICD-11. *World Psychiatry, 12*(3), 198-206.
- McFetridge, M., Hauenstein Swan, A., Heke, S., Karatzias, T., Greenberg, N., Kitchiner, N., et al. (2017). *Guideline for the treatment and planning of services for complex post-traumatic stress disorder in adults*. Retrieved from http://www.ukpts.co.uk/guidance_11_2920929231.pdf.
- Mikal, J. P., Rice, R. E., Abeyta, A., & DeVilbiss, J. (2013). Transition, stress and computer-mediated social support. *Computers in Human Behavior, 29*(5), A40-A53.
- Military vs Civilian Life. (2017). Retrieved from <https://lawaspect.com/military-vs-civilian-life/>
- Miller, M., Barber, C., Young, M., Azrael, D., Mukamal, K., & Lawler, E. (2012). Veterans and suicide: A reexamination of the national death Index–Linked national health interview survey. *American Journal of Public Health, 102*, S154-S159.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Med, 6*(7), e1000097.

Mohren, D. C., Swaen, G. M., Kant, I., Schayck, C. P., & Galama, J. M. (2005).

Fatigue and job stress as predictors for sickness absence during common infections. *International Journal of Behavioral Medicine*, 12(1), 11-20.

Morin, R. (2011). *The difficult transition from military to civilian life*. Retrieved from <http://www.pewsocialtrends.org/2011/12/08/the-difficult-transition-from-military-to-civilian-life/>

National Institute for Health and Care Excellence. (2012a). *Appendix F Quality appraisal checklist – quantitative intervention studies*. Retrieved from <https://www.nice.org.uk/process/pmg4/chapter/appendix-f-quality-appraisal-checklist-quantitative-intervention-studies>

National Institute for Health and Care Excellence. (2012b). *Appendix H Quality appraisal checklist – qualitative studies*. Retrieved from <https://www.nice.org.uk/process/pmg4/chapter/appendix-h-quality-appraisal-checklist-qualitative-studies>

O'Neill, D. J., & Fontaine, G. D. (1973). Counseling for the Vietnam veteran. *Journal of College Student Personnel*, 14(2), 153-155.

Orth-Gomer, K., Wamala, S. P., Horsten, M., Schenck-Gustafsson, K., Schneiderman, N., & Mittleman, M. A. (2000). Marital stress worsens prognosis in women with coronary heart disease: The Stockholm female coronary risk study. *Jama*, 284(23), 3008-3014.

Piaget, J. (1928). *Judgement and reasoning on the child*. London: Kegan Paul.

Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. M. (2009). Perceived stigma and barriers to mental health care utilization among OEF-OIF veterans. *Psychiatric Services*, 60(8), 1118-1122.

Pluye, P., Robert, E., Cargo, M., Bartlett, G., O’Cathain, A., Griffiths, F., et al. (2011).

Proposal: A mixed methods appraisal tool for systematic mixed studies

reviews. Retrieved from <http://mixedmethodsappraisaltoolpublic.pbworks.com>.

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., et al. (2006).

Guidance on the conduct of narrative synthesis in systematic reviews. Results

of an ESRC funded research project (unpublished report): University of

Lancaster.

Richardson, C., & Waldrop, J. (2003). *Veterans: 2000: Census 2000 Brief*. Retrieved

from <https://www.census.gov/prod/2003pubs/c2kbr-22.pdf>

Royal British Legion. (2014). *A UK household survey of the ex-service community*

Retrieved from <https://www.britishlegion.org.uk/media/2275/2014household>

[surveyreport.pdf](#)

Sacks, D. A., & Koppes, R. H. (1986). Blood transfusion and Jehovah’s witnesses:

Medical and legal issues in obstetrics and gynecology. *American Journal of*

Obstetrics and Gynecology, 154(3), 483-486.

Sayer, N. A., Noorbaloochi, S., Frazier, P., Carlson, K., Gravely, A., & Murdoch, M.

(2010). Reintegration problems and treatment interests among Iraq and

Afghanistan combat veterans receiving VA medical care. *Psychiatric Services*,

61(6), 589-597.

Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The*

Counseling Psychologist, 9(2), 2-18.

Schonfeld, L., Braue, L. A., Stire, S., Gum, A. M., Cross, B. L., & Brown, L. M.

(2015). Behavioral health and adjustment to college life for student service

Members/Veterans. *Journal of American College Health*, 63(7), 428-436.

Sharpe, L., & Curran, L. (2006). Understanding the process of adjustment to illness.

Social Science & Medicine, 62(5), 1153-1166.

Spiegel, P. E., & Shultz, K. S. (2003). The influence of preretirement planning and

transferability of skills on naval officers' retirement satisfaction and

adjustment. *Military Psychology*, 15(4), 285-307.

Stanton, A. L., Revenson, T. A., & Tennen, H. (2007). Health psychology:

Psychological adjustment to chronic disease. *Annual Review of Psychology*, 58,

565-592.

Strayer, R., & Ellenhorn, L. (1975). Vietnam veterans: A study exploring adjustment

patterns and attitudes. *Journal of Social Issues*, 31(4), 81-93.

Taylor, M. A., Shultz, K. S., Spiegel, P. E., Morrison, R. F., & Greene, J. (2007).

Occupational attachment and met expectations as predictors of retirement

adjustment of naval officers. *Journal of Applied Social Psychology*, 37(8),

1697-1725.

Teachman, J., & Tedrow, L. (2013). Veteran status and body weight: A longitudinal

fixed-effects approach. *Population Research and Policy Review*, 32(2), 199

-220.

The Army Leadership Code. (2015). Retrieved from [http://www.army.mod.uk/](http://www.army.mod.uk/documents/general/rmas_AC72021TheArmyLeadershipCode.pdf)

[documents/general/rmas_AC72021TheArmyLeadershipCode.pdf](http://www.army.mod.uk/documents/general/rmas_AC72021TheArmyLeadershipCode.pdf)

Thompson, J., Hopman, W., Sweet, J., VanTil, L., MacLean, M. B., VanDenKerkhof,

E., et al. (2013). Health-related quality of life of Canadian forces veterans after

transition to civilian life. *Canadian Journal of Public Health-Revue*

Canadienne De Sante Publique, 104(1), E15-E21.

Tsutsumi, A., Kayaba, K., Kario, K., & Ishikawa, S. (2009). Prospective study on

Factors affecting adjustment to civilian life
occupational stress and risk of stroke. *Archives of Internal Medicine*, 169(1),
56-61.

Veterans Affairs Healthcare. (n.d). *Common challenges during readjustment*.

Retrieved from <http://www.mentalhealth.va.gov/communityproviders/docs/readjustment.pdf>

Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, 55(2), 209-223.

Whybrow, D., Jones, N., & Greenberg, N. (2015). Promoting organizational well being: A comprehensive review of trauma risk management. *Occupational Medicine*, 65(4), 331-336.

Williams, J. E., & Flora, J. A. (1995). Health behavior segmentation and campaign planning to reduce cardiovascular disease risk among Hispanics. *Health Education & Behavior*, 22(1), 36-48.

You, J., & Lu, Q. (2014). Sources of social support and adjustment among Chinese cancer survivors: Gender and age differences. *Supportive Care in Cancer*, 22(3), 697-704.

Part Two: Empirical Paper

This paper is written in the format ready for submission to the *British Journal of Psychology*. See Appendix I for Author Guidelines.

Running head: Identity and adjustment in ex-military amputees

Personal and societal influences on the identity of ex-military amputees

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Abstract

Ex-military amputees must negotiate a number of changes upon their return to civilian life, including differences in their identity. Higgins (1987) suggested that an individual's identity is developed in accordance with one's own values and the perspectives of those around them. This study used narrative analysis to explore the experiences of ex-military amputees, their self-perceptions and how they feel they are perceived by those around them. The influence of these on their identity was considered, and through Holistic-Form analysis two plot themes were developed. 'Overcoming Adversity' narratives progressed positively, whereas the 'Continued Adversity' narrative progressed slower and contained more negative experiences. Holistic-Content analysis produced five distinct identity categories; 'Military Identity', 'Continuity in Identity', 'New Identity', 'Amputee Identity', 'Social Identity'. Character analysis found those with more positive alliances and social perspectives appeared to progress more easily. Whereas those with greater discrepancies between their actual, ideal and ought self, experienced more psychological distress. The differing narrative plots demonstrate the importance of support for amputees throughout their life and the potential use of Acceptance and Commitment Therapy. Systemic support through education and Community Psychology could help reduce negative societal reactions.

Key Words: Ex-military Amputee, Identity, Self-perception, Societal Perception, Narrative

Introduction

Following conflict in Iraq and Afghanistan, an increasing number of service personnel have experienced traumatic amputation (Ministry of Defence, 2014). Through medical advances and training, the chances of surviving amputation in conflict have increased

(Signor, 2014). With a growing number of military personnel experiencing and surviving traumatic amputation, research into how to support these individuals is needed.

Research has tracked depression and anxiety in civilian amputees while in an inpatient ward and at 2-3 years following discharge (Singh *et al.*, 2009). They found the prevalence of depression and anxiety dropped from 23.5% at admission, to 2.9% at discharge. However, 2-3 years later 17.6% experienced anxiety and 19.1% had depression, suggesting although amputees' mental health stabilises during rehabilitation, it deteriorates in the community. Though their study was conducted on a non-military population, care of UK military amputees is transferred to the NHS shortly after injury. They then receive inpatient rehabilitation at Hedley Court, so could experience similar difficulties upon discharge. Ex-military amputees will then undergo further adjustments, including finding employment or a role in society.

Military Amputees Adjustment

Following amputation, patients must adjust to the changes it brings to their physical appearance, ability and identity (Horgan & MacLachlan, 2004).

Gunawardena, Senevirathne, and Athauda (2007) found amputees experience significantly higher levels of psychological distress than age-matched controls; though they did not explore how this distress can be tolerated or reduced. Cater (2012) examined psychological adjustment in female amputees in America. She found issues of grief and loss were prevalent, but the army "kick butt" (p.1443) attitude increased courage and resilience, which facilitated adjustment.

Positive adjustment has been aided by undertaking competitive sport, increasing problem solving and seeking social support; whereas barriers can be avoidance,

depression, post-traumatic stress disorder and rumination (Desmond, 2007; Phelps, Williams, Raichle, Turner, & Ehde, 2008; Benetato, 2011; Caddick & Smith, 2014).

Identity changes

Following amputation, individuals may undergo changes to their identity due to changes in their physical appearance and independence. McRuer (2006) proposed crip theory, which suggests that people without a disability do not view being able-bodied as part of their identity; however, those who are disabled are forced, by society, to incorporate it into their identity. He argued that society assumes people are able-bodied, creating a stigma around those who are not. As well as adapting to the changes to their appearance and ability, amputees must adapt their identity to fit with how they feel they are perceived by society.

Many theories have tried to encapsulate the development of the self and resultant psychological distress. Self-discrepancy theory encompasses the development of the self, incorporating individual and societal values (Higgins, 1987). Higgins suggested that the self has three domains; the actual, ideal and ought self. The actual self, is an individual's understanding of the qualities they possess. The ideal self, is an individual's understanding of what they, and others, would like them to possess. The ought self, is an individual's understanding of the qualities they, or others, believe they should possess. He argued the domains of the self are influenced by individuals and those around them, including groups. He felt the impact of others had been overlooked and suggested the domains of the self, should incorporate the multiple standpoints from which they arise. Discrepancies between the domains of the self, create psychological distress.

While narrative identity theory argues our memories are inextricably linked to the self-concept which we create (Singer, 2004). This theory argues that individuals have a number of memories from events and experiences some of which will have similarities. The more similarities there are between their experiences and memories the more important these memories become and the stronger influence they have on an individual's self-concept. Equally, some of these memories become what they term self-defining memories. These are memories which are usually more emotionally intense, vivid and when spoken about seem well-rehearsed. Similarities across self-defining memories begin to be organised and create schemas or narrative scripts, which are more robust assumptions about the world and oneself. However, these scripts and schemas can be changed to incorporate new experiences across the lifespan. These scripts, along with other beliefs, values and internal working models, form the basis of an individual's self and their life-story which they feel encompasses their experiences. This theory therefore argues that without the development of a coherent narrative, individuals are likely to experience psychological difficulties and fragmentation of their personality or identity.

Recent research within positive psychology models has also begun to research positive aspects or reflections that come out of negative experiences, this has been termed post-traumatic growth. Although the areas of growth and factors which affect it are still debated in the literature, Tedeschi and Calhoun (1996) argued there are five main domains; personal strength, new possibilities, relating to others, appreciation of life, spiritual change. Personal strength relates to the individuals ability to cope with difficult events and often leads to an individual feeling stronger and more resilient. New possibilities includes the individual having a new perspective which allows them to decide what is meaningful or important to them and to reprioritize their time and

values. They also argued that individuals appeared to report closer and more meaningful relationships which they named relating to others. They noticed individuals appeared to report feeling “lucky” and that they receive greater satisfaction from things which they would have previously taken for granted, such as spending time with their children. Finally, they noted spiritual change. Once some individuals’ spiritual beliefs had been challenged they noticed their faith or feeling of spiritual connection increased. Likewise, within narrative identity research growth following negative life experiences has been identified (Pals, 2006). This process has often been termed redemption as the initially negative event appears to have had a positive impact. This process appears to require the individual to explore the negative or traumatic event in detail to allow it to become integrated into their life story.

Following this individuals are then able to consider the positive influence the event may have had as well as the negatives from that experience. Therefore, although ex-military amputees will have undergone a life-changing event, which may have initially been perceived as negative, these theories suggest there may also aspects which positively influence the individual’s self-concept and life.

The transition from military to civilian life requires a shift in the person’s identity (Herman & Yarwood, 2014). The ways in which service personnel and operational tours are viewed by society also varies (Dean, 1992). Dean suggested the acts of soldiers in the Vietnam War were scorned by society, due to the destruction and resultant deaths of innocent citizens. Equally, he noted that they were not welcomed with the same reception as veterans from previous US wars.

Reznick (2008) also documented societal influences on amputees. He noted industrialisation has advanced medical care and prosthesis development. He also suggested that society affects the rehabilitation amputees receive and their

reintegration into society. Support from an amputee's family and workplace also aids adjustment (Valizadeh, Dadkhah, Mohammadi, & Hassankhani, 2014). The literature suggests social and personal factors impact on a person's identity and discrepancies between the domains of the self cause psychological distress. Equally, society holds negative views about physical disabilities and shows mixed responses to military personnel. This could make the adjustment of ex-military amputees more challenging, due to societal views around disability and the armed forces.

Rationale and aims

As the number of ex-military amputees increases, it seems there is a need to help facilitate adjustment and increase their quality of life, as it remains lower than able-bodied individuals (Knežević *et al.*, 2015). Those adapting to both the transition from the armed forces and becoming an amputee have not been studied. An individual's self-concept increases in complexity, as the number of groups or identities they are a part of increases, leaving them more vulnerable to psychological distress (Cote & Levine, 2002). Similarly, Higgins (1987) suggested psychological distress increases with discrepancies between the actual, ideal and ought self. As identity is constructed in relation to one's own values, and the values of others, this research aimed to further understand ex-military amputees' self-perceptions, their experiences of societal perceptions and their impact on identity.

The research questions were:

- *How do the person's self-perceptions and experiences of societal perceptions affect identity?*
- *How do ex-military amputees' narratives suggest they perceive themselves?*
- *How do ex-military amputees' narratives suggest they feel they are perceived by those around them and society?*

Methods

Design

Prior research primarily uses quantitative analysis without consideration that this may not fully capture ex-military amputees' experiences. Due to the limited knowledge of their experiences, a qualitative design was used. Narrative Analysis was conducted as it explores experiences over time and has been deemed "*particularly appropriate*" (p.536) to understand chronic illness (Bleakley, 2005). Equally, narratives have been suggested to aid the expression of identity and in resolving difficult experiences (McAdams & McLean, 2013; Singer, Blagov, Berry, & Oost, 2013). This allowed exploration of their life narrative and aimed to capture important memories or experiences to understand the development and change of their identity over time. This research was not interested in defining identity, or its meaning, and so it was not necessary to explicitly ask individuals to define concepts related to their identity. The use of narrative interviews and narrative analysis therefore allowed related concepts, such as self-discrepancy theory and post-traumatic growth, to be explored if relevant to the information spontaneously provided by participants. It was also felt that the use of narrative methods was likely to be more accessible to individuals as identity is an abstract concept which may have been difficult to define in more directive interviews.

Full ethical approval was granted by the University of Hull's Faculty of Health and Social Care Research Ethics Committee (Appendix J).

Participants

Numerous veterans' charities were contacted and opportunity sampling was used. Individuals were included if they were ex-military and had undergone amputation, of one or more limbs, due to traumatic injury at least one year prior. Participants were over 18 and native English speakers. Individuals with limb salvage were excluded.

Table 1 contains the participants' demographic information.

Table 1. Demographic information

Pseudonym	Age	Gender	Military role	Amputation	Years since amputation
Joey	50	Male	Infantry Soldier	Both legs, above knee	25
Zak	52	Male	Combat Engineer	One leg below knee	12
George	27	Male	Infantry Soldier	Both legs, one above knee, one below knee	6
Callum	54	Male	Royal Engineer	One leg, above knee	30
Olivia	38	Female	Royal Artillery	One leg, below knee	8

Procedure

Narratives were collected through interviews. Prior to the interviews participants were sent the information sheet (Appendix K), consent form (Appendix L), and sources of support sheet (Appendix M). Full consent was obtained before commencing the interview. A brief demographic questionnaire was also completed (Appendix N). In keeping with narrative interviewing, participants were not asked specific questions, nor interrupted during the telling of their stories (Jovchelovitch & Bauer, 2000). They were encouraged to start their narrative at any point following amputation and

informed that the research was focused on how they perceived themselves and how they felt other people perceived them (Appendix O). Once participants had concluded their story, the researcher asked clarifying or exploratory questions to elicit a shared understanding of the narrative. Two interviews were conducted over the telephone, two in participants' houses and one in a residential setting. Interviews ranged from 46 to 67 minutes.

Data Analysis

Holistic-Form and Holistic-Content methods were used, based on Lieblich, Tuval-Mashiach, and Zilber's (1998) model of narrative analysis. Holistic analysis allowed the person's story to be understood within the context of the rest of the narrative. Form analysis identified significant parts of the story and the sequence of events. Content analysis assessed what information they conveyed, its meaning, and how they made sense of their experiences.

The analysis was conducted in five stages. Holistic-Form analysis was conducted first to give an overview of the narratives before attending to specific content. Firstly, narratives were read and re-listened to. This increased the author's familiarity with the data and the foci of the stories (Lieblich *et al.*, 1998). Secondly, narratives were ordered chronologically and organised around the significant events, emotions or actions. Thirdly, the plot of the narratives was considered. The overall plot was analysed giving rise to a plot theme. Then, using archetypes based on Frye (1957) and Gergen and Gergen (1988), the plot axis was identified. Fourthly, as suggested by Beal (2013), once the narratives had been analysed individually they were collated. During these stages, the main focus of the analysis was on the person's self-perceptions and identity. Fifthly, as this study was interested in the influence of others, the characters

in the narratives were analysed. Particular attention was paid to the relationship and influence of other characters on the participants.

Researcher Influence and Quality Assurance

The researcher was a 24 year old, white British, female, able-bodied civilian, with no military background. Being a Trainee Clinical Psychologist, the researcher approached the narratives from a psychological standpoint. The researcher's supervisors were from a range of backgrounds offering military, academic and clinical perspectives, thereby widening the perspectives considered during analysis. The researcher attended qualitative and reflective research groups, which guided the analysis and increased the researcher's awareness of her biases. The data and results were also discussed with multiple colleagues. For further consideration of the researcher's epistemological standpoint and reflections see Appendices S and T.

Results

Plot

The Holistic-Form analysis identified eleven phases (see Table 2). Following amputation, four of the narratives were predominantly positive, showing growth and adjustment. Their plot theme was named 'Overcoming Adversity':

"life-changing always has this negative connotation but it doesn't have to ... cause we can adapt" Olivia

Callum's story described negative experiences throughout, reflecting a 'Continued Adversity' plot theme:

"somebody chops away your leg... and although it it needed to be done ... you feel well I haven't got anything left"

The plot themes contained a number of differences. The ‘Overcoming Adversity’ narratives contained less detail about participants’ childhoods or prior circumstances, and began with their time in the army or at injury. Conversely, the ‘Continued Adversity’ narrative included Callum’s childhood, but omitted details about his injury. Neither did it describe a time where the implications of injury were accepted, which seemed important in the other narratives. Finally, the ‘Overcoming Adversity’ narratives portrayed the individual as the agent of change, working alongside others. In the ‘Continued Adversity’ narrative, Callum recognised himself as the agent of change, but described less external support. He was the first to undergo amputation, so some of the differences could be contextual, as advances have been made. Callum’s childhood experiences and negative self-perception also appeared to negatively affect his narratives progression.

The ‘Overcoming Adversity’ narratives contained two different plot axes. Two narratives described the success of the main protagonist in achieving things, which amputees had never done before, almost immediately following rehabilitation. Their plot axis was named ‘Self-Efficacy’ (see Figure 1). Although the other two narratives describe their experiences positively, their narratives progressed slower (see Figure 2) and contained more about the impact of others, giving rise to a ‘Progressive’ (Gergen & Gergen, 1988) plot axis:

“we have to start looking down at where our feet are going ... and then you look up a bit further and obviously there’s flowers, there’s trees there birds there’s animals there’s whatever and again ... it takes time to get there”
Zak

Finally, Callum’s narrative presented a negative influence of himself and others which, although these were overcome, presented a continual struggle consistent with the ‘Tragedy’ plot axis (see Figure 3; Frye, 1957). Graphs were produced to show the

progression and mood of the narratives during each phase. Further details about the emotions within each stage are presented in the story phase section. To allow comparison, all phases have been included on the plot axes graphs, but not all phases were included each narrative. Breaks in the lines show that story phase was absent in those plots.

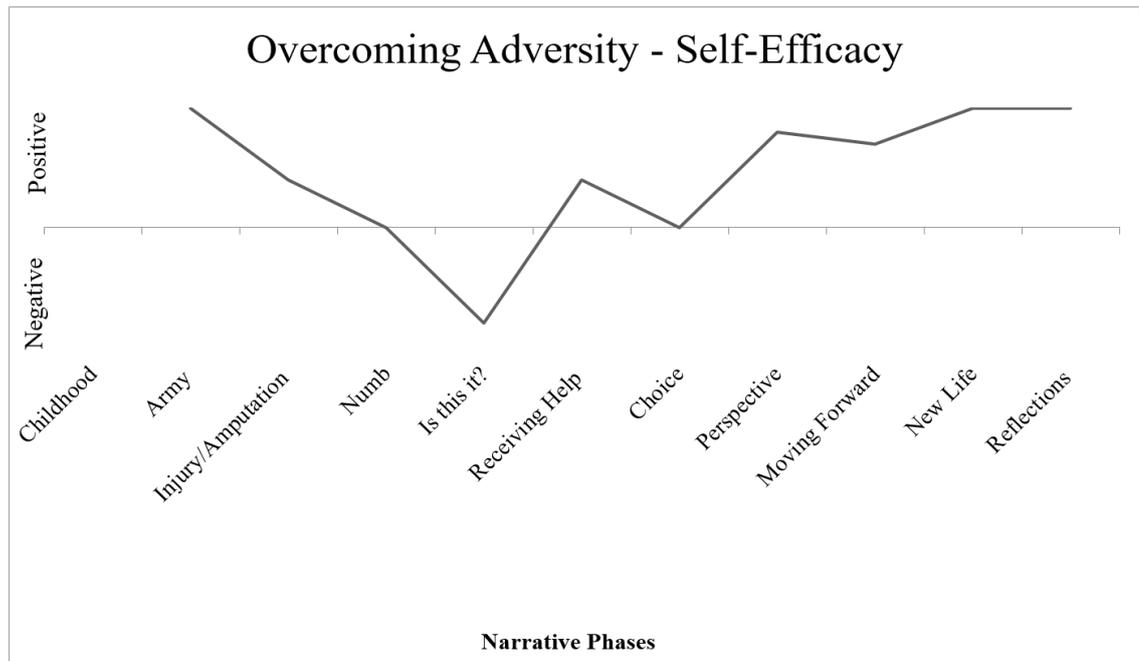


Figure 1. Plot axis 'Overcoming Adversity-Self-Efficacy'.

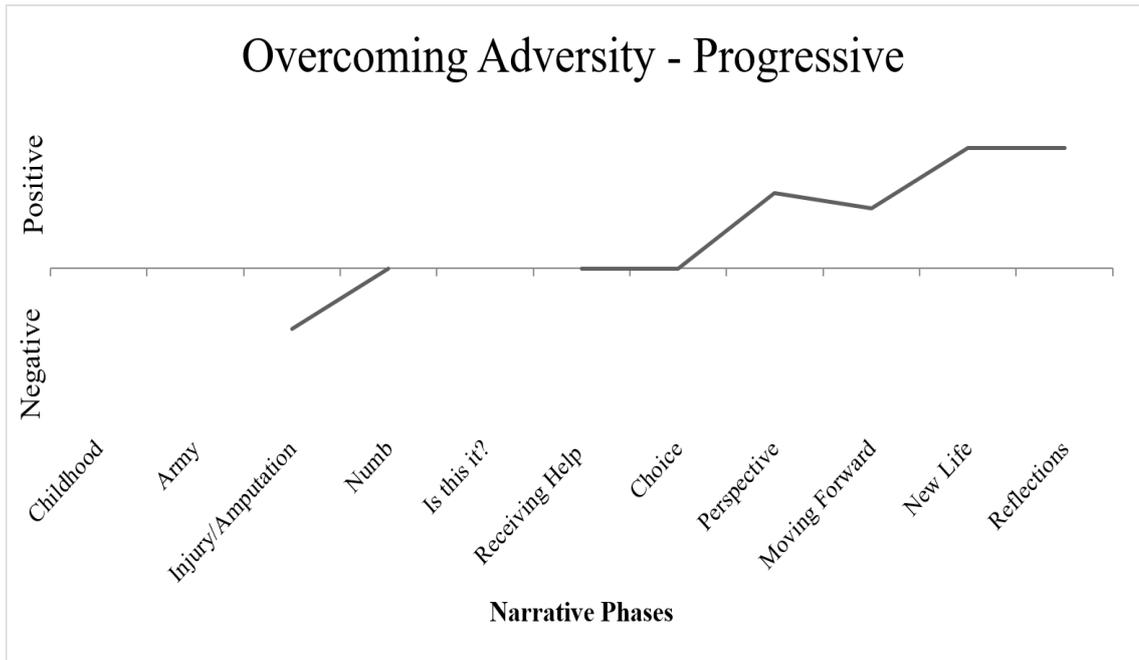


Figure 2. Plot axis 'Overcoming Adversity-Progressive'. Three story phases ('Childhood', 'Army' and 'Is this it?') were absent.

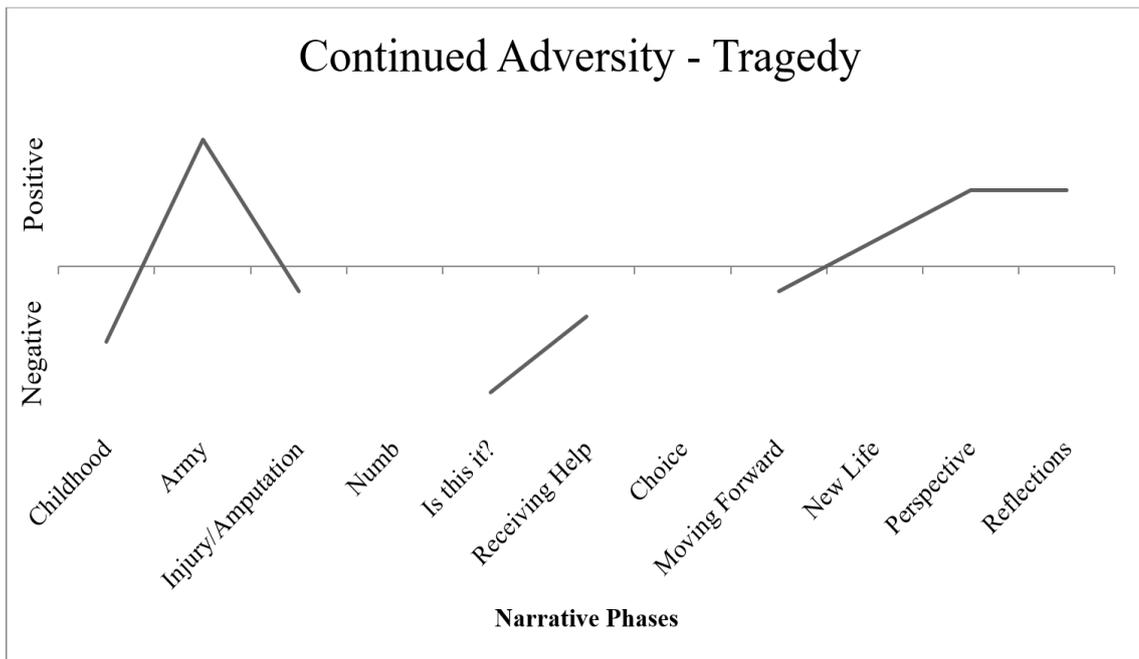


Figure 3. Plot axis 'Continued Adversity-Tragedy'. Two story phases ('Numb' and 'Choice') were absent.

Table 2. Phases identified

Phase Number	Phase Name
1	Childhood
2	Army
3	Injury/Amputation
4	Numb
5	Is this it?
6	Receiving Help
7	Choice
8	Perspective
9	Moving Forward
10	New Life
11	Reflections

The results are organised into three sections to address each of the research questions.

Section 1: Identity

How do the person's self-perceptions and experiences of societal perceptions affect identity?

The narratives showed a number of differences in the person's individual identity, and the influence of others. Form analysis found that individuals mainly presented descriptions of their identity at the beginning and end of narratives. This reflected the individual's old military identity and their new identity as a civilian amputee. Content analysis showed many participants had been defined by the military and their activities or interests in that environment. Following amputation participants' identities broadened beyond one group.

Military Identity

Three participants proudly described a strong military identity. They recognised the impact the army had had on their progression to adulthood and in developing a sense of self:

“I was very much a a sponge, so I joined as a boy... and urr the the military moulded me” Joey

“they take you in as a civilian and then they strip that out of you ... beat you down first when when they got you at the bottom they then build you up as a soldier” Callum

The descriptions of themselves at this time primarily reflected being “*active*” (Olivia) and “*fit*” (Joey). For Callum, this was the “*peak*”:

“you think you’re better than anybody else because now I can run a BFT in 7.5 minutes”

Continuity in identity

Although all participants were civilians, they maintained some of their military identity by continuing what they had previously enjoyed:

“I’m still doing the stuff that I’ve been doing. I’m still enjoying the the things that I’ve always been doing before as well” George

“developing people really which is what I enjoyed most about being in the army developing people” Olivia

They preserved their fitness through sports and pushed themselves beyond what would normally be expected by completing “*expeditions*” (Joey and Olivia):

“I learnt to water ski” Callum

“Became a sky diver” Joey

Individuals recognised elements of themselves which were constant from the military to present day, as well as continuity in their perception of themselves separate to their military identity:

“I’m still the same ... even though I lost my legs I am still the same” George

Joey’s narrative suggested he had always been a relaxed and “*impetuous*” person:

“I kinda like the urr the spontaneity and a little bit of urm come whatever ethos”

While Callum recognised the impact of his early experiences and prior self-perception:

“I think how you are as a person to start with ... affects the way the outlook of it”

This demonstrates the continuity within their identity and its influence on their perceptions.

New identity

Participants also demonstrated changes to their self-concept and the development of new identities. Callum described “*psychological pain*” in developing a new identity stating: “*you don’t feel able to be that person that you were in the first place*”.

For three of the participants, an alternative civilian identity had been planned for, which aided their transition. This primarily manifested in a professional identity:

“I’ve always wanted to go to university” George

“I set up a business so I work for myself” Olivia

Other new identities included becoming a “*life coach*” (Olivia), “*mentor*” (Zak), doing “*public speaking*” (George) or “*motivational stuff*” (Joey).

Olivia described feeling proud that the local community had been unaware she was an amputee, allowing her to build a separate identity:

“it was quite a shock when it came out which was quite nice”

Callum developed a positive professional identity, however, still grieved for his military identity:

“I retrained and got that job I felt better in myself ... but you still feel there are a lot of things that you wanted to do that you can't do ... I can't run ... I can't walk for long distances”

Amputee Identity

All individuals identified themselves differently following amputation, representing a change from being “able-bodied” (Callum) to “disabled” (Joey). For some, this occurred following changes to their physical appearance:

“I was thinking urr ‘you're a fucking mess what a fucking mess you are’”
Joey

Over time, this new social identity was perceived positively, as it provided a group they could identify with:

“knowing that you are sort of part of a club ... there is that feeling of belonging still” Olivia

They found comfort in knowing they were not the only amputee and hoped that other amputees could offer support.

Contrastingly, Callum continued to struggle:

“when I was able-bodied I had that self-belief I can do this I can do that I can do the other ... I've lost me leg, I've got other problems as well ... so I've become a little bit more introvert”

This represented a difference between Callum's military identity and his amputee identity, which was similar to his identity as a child. Callum felt he was “back to

square one again", which may reflect returning to his previous identity upon being discharged from the army.

Social Identity

Individuals experienced prejudices from societal views around the military. Joey described not wanting to "*gob off*" about being a soldier as people perceived it as "*dirty*" and that they "*just got into pub fights*". While George felt individuals' "*personal views*", regarding recent conflicts, impinged on society "*acknowledging the sacrifices that we've made*" and therefore the UK society appeared less "*supportive*", or had less "*respect*" than the US.

Likewise, society's views of amputees were primarily negative:

"amputation urr mental health, these are things that people still shy away from" Zak

Participants appeared to continue to perceive themselves positively, despite also believing society thinks their disability limits them:

"We're not weird people, we are people with disabilities ... or other abilities to some some respect" Joey

Participants' narratives described a strong military identity which influenced their civilian identity. Individuals also recognised continuity between their prior self-perception and their current identity. Those with an 'Overcoming Adversity' plot assimilated their experiences and created a new positive identity for themselves. Contrastingly, in the 'Continued Adversity' narrative, Callum viewed his military identity more positively than his new identities. Callum had just taken medical retirement, thereby removing his professional identity, which may have affected his ability to positively reflect on his current identity.

Section 2: Story Phases

During Holistic-Form analysis the narrative's structure was analysed for context.

Holistic-Content analysis of the story phases focussed on the individuals' self-perceptions, addressing the second research question: *How do ex-military amputees' narratives suggest they perceive themselves?* Phases 1 and 2 provide the individuals' background. Phases 3-6 describe the injury and the initial reactions. Phases 7 and 8 contain important turning points, followed by 9-11 detailing their adjustment and progression. Descriptions of each phase have been limited in the main body of the text. For further quotes see Appendix P.

Phase 1: Childhood

Limited information about participants' childhood experiences was given. Most individuals joined the army young and recognised their limited time in education, with Joey describing himself as a "*stupid stew*". Callum described his childhood personality and interests:

"I was mainly urr into engineering, I always liked engines ... going back 10-year-old I was building motorbike engines"

He also presented himself as full of "*doubt*":

"it was always my fault so if you withdraw and you bottle everything up ... so you don't don't have the confidence to go ahead"

Phase 2: Army

This phase appeared a positive and enjoyable time, where participants developed strong bonds:

"I could have carried on ... doing that until the end" Callum

"in the military it its more or less like a family" George

Some described perceptions of infantry personnel as “*Baldrick’s*” (Joey) or “*sock-heads*” (George) as they just did what they were told.

Phase 3: Injury/Amputation

This phase described their injury and encompassed joy, anger and anxiety. The ‘Self-Efficacy’ narratives described the countries’ atmospheres positively, stating that they “*really enjoyed working out there*” (Joey) and everyone was “*happy and singing*” (George). Contrastingly, the ‘Progressive’ narratives described a more tense environment due to increased threat levels:

“the atmospherics of [country] changed at the time because of outside influences coming in and there was a higher risk of IED’s” Zak

Two participants expressed anger about the circumstances under which they sustained their injuries:

“in the MOD or the militaries infinite wisdom they thought it was a great idea” Joey

Phase 4: Numb

Initially, four participants appeared unaware of what had happened. This phase was largely absent of emotional or physical sensation, and participant’s self-perceptions, reflecting their “*stunned*” (Joey) state:

“I didn’t realise what had happened I thought it was just a a road traffic accident” Zak

“it wasn’t really until then that I realised that my legs felt a little bit sort of weird, a little bit funny, so I kind of felt down and then could feel that there were broken bones” Olivia

Phase 5: Is this it?

Once participants had realised the severity of their injury, some described despair and fear leading to suicidal ideation, alongside the threat of death:

“I’d lost my leg and that was I’d lost my career I’d lost everything I’d se dreamt about at the time” Callum

*“in the back of my mind I was just saying to myself ... if the chopper comes in in 15 minutes then I’ll make it if not *laughs* you know what I mean, I’m well that’s me you know” George*

This phase was absent in the progressive narratives as they did not experience traumatic amputation.

Phase 6: Receiving Help

This encompassed the help individuals received in the field, the journey to hospital, and their hospital treatment. This phase contained the most extreme expressions of emotions, most commonly fear or panic, expressed through screaming and crying, but ended abruptly as participants were placed in a coma. The ‘Self-Efficacy’ narratives spoke about this phase positively and expressed gratitude towards those who helped them:

“I haven’t had the the chance to thank her for what she did for me ... but urm you know she is always she is always been in my mind” George

Conversely, in the ‘Continued Adversity’ story, Callum appreciated the physical healthcare he received, though felt it was “*not enough*” to facilitate his transition and consequently felt rejected:

“the army as a whole ... as an amputation amputee uh are ok with they treat you with ... utmost professionalism urr with the care ... but ... urm once they have got you more mobile they then wash their hands of you, they want to be rid of you”

This affected Callum's self-perception as he lost his military identity:

"you think well, 'if I'm no good for the army why am I good for anything?'"

In the 'Progressive' narratives, this phase was devoid of emotional content, possibly because the extent of their injuries was not immediately known.

Phase 7: Choice

The 'Choice' phase helped amputees move forward, but was only present in the 'Overcoming Adversity' narratives. This phase, though reflected on positively overall, contained limited emotion and presented a seemingly simple choice. In the 'Self-Efficacy' narratives, this was the choice to accept their amputation:

"I just thought well I've got a choice here haven't I. I can sit here with my chin on my chest and let some fucker wipe my arse for me for the rest of my life ... or I can pick me chin up and just get on just do something, do whatever I can do with what I've got left ... so that's what I chose to do really just chin up and get on with it" Joey

While for the 'Progressive' narratives this was the decision about whether or not to undergo amputation. Due to the nature and severity of their injuries had they not undergone amputation they would have remained with chronic pain, a dependence on pain killers and difficulties with mobility:

"it was very clear choice because I saw it it was a decision based on function" Olivia

"the only way to get off the drugs and the medication it was giving me was to have the amputation and hope it worked" Zak

Phase 8: Perspective

Participants appeared to feel lucky to only have their injuries stating “*it could have been worse*” (Zak). They described their injuries as a “*scratch*”(Zak) “*papercut*”(Olivia) and “*flesh wound*” (Callum):

“with one of the guys dying I felt really lucky to be alive and then one of the other lads who was injured very very ill for a couple of weeks both his legs were badly broken and he they ended up having to amputate both of his legs below the knee they basically to save his life so I again, I felt well I’ve been able to make that decision for myself” Olivia

Although this phase primarily occurred following injury, it was present at a number of time points across the narratives. This perspective helped participants consider their injury and themselves more positively. Equally, for Zak and Olivia they also felt lucky to have had some input into the decision to have an amputation and to develop their own awareness about the potential difficulties prior to amputation.

Phase 9: Moving Forward

All participants had a stage of rehabilitation and learning to adapt. This phase was primarily positive. Participants expressed gratitude for the support they received and the instrumental part this played in their progression:

“I had the good fortune to go to Hedley Court ... which is a you know phenomenal place” Olivia

It also contained challenges and frustrations:

“everything that I’m doing right now I I have to learn that even sitting down ... I have to learn that so it was ... a tough process” George

Phase 10: New Life

This phase recognised the struggles individuals faced on return to ‘civvy street’.

Although participants had progressed and were coping, the beginning of this phase

contained anxieties about other people's reactions, regardless of the more positive self-perception they had developed:

"I was really bit, I'm not going to say scared of but concerned ... kinda? but people that knew me before when I had my legs and afterwards ... how they gonna treat me ... is that going to be different or not?" George

This section included employment, be that the difficulties in finding work, or how it gave them a purpose:

"workwise I thinks it's the hardest because people are scared of employing you in case you a you trip" Zak

"I'd work from 7 o'clock in the morning to 7 o'clock at night ... yeah 6 or 7 days a week" Callum

By the end of this section amputees appeared to be positive and coping well:

"If you can occupy yourself, be mindful ... you can forget about the restriction ... because it might not be an issue" Zak

"the boys were wanted to do other different things ... you know like they'd want to sit and play games on the computer ... or PlayStation things like that so I'd sit and play games ... it was all about spending time" Callum

Although all progressed and developed positive self-perceptions, this phase was cyclical as challenges emerged. Some also underwent further surgery.

Phase 11: Reflections

Finally, participants reflected on their progress since amputation, including the strength of character they had showed. Feelings of pride, joy and contentment were also conveyed, demonstrating post-traumatic growth:

"I've always believed in this saying what doesn't kill you makes you stronger" George

Those who had inputted into the decision to amputate were also able to reflect on the positives of being able to be part of that decision and the added quality of life they had

compared to when they had sustained their injuries but had not had their leg amputated:

“it was a saviour having the leg taken off, because it literally did take the reliance of on medication away” Zak

Due to the number of challenges they had overcome, feelings of anxiety and anger were also present:

“sometimes it’s frustrating you feel gosh you know it’s been 8 years and I still feel like sometimes I’m adapting and dealing with things that ... will this ever end” Olivia

Section 3: Character Analysis

The final part of the Holistic-Content analysis focused on the characters in the narratives. This addressed the final research question: *How do ex-military amputees’ narratives suggest they feel they are perceived by those around them and society?*

Figure 4 summarises the characters from participants’ narratives. Those on the left-hand side represent predominantly negative influences; those in the middle had a mixed portrayal, whereas those on the right were portrayed positively. The circles represent when the characters entered the narratives, with those closest to the centre appearing earlier on.

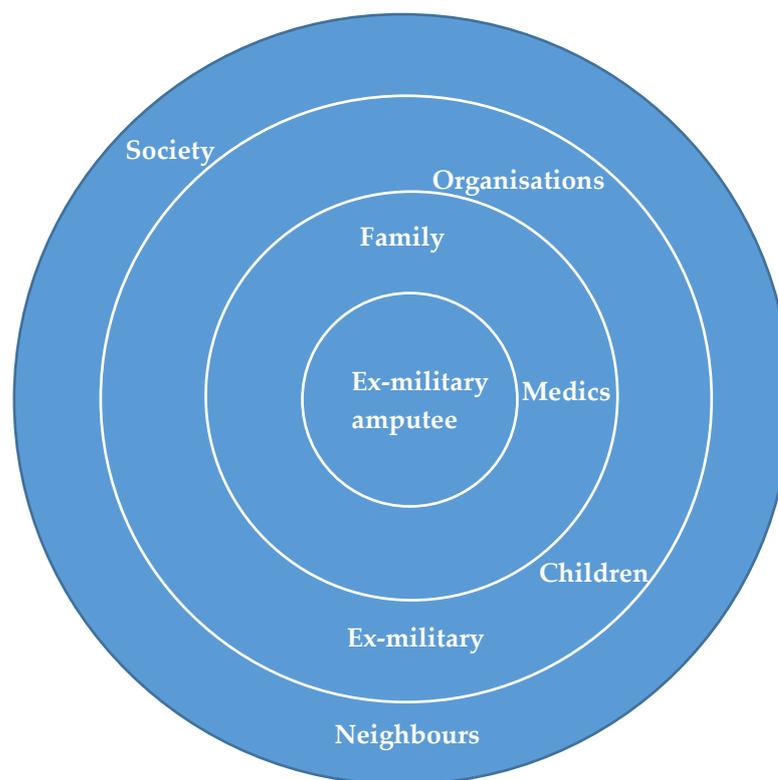


Figure 4. Characters involved in narratives

Society

“I felt treated a bit like a leppa” Callum

Amputees discussed negative reactions from society, telling stories of people not wanting them to be out in public, or how they should be kept separate:

“I was in [shop] in [city] and this Asian woman in a sari came in and she had her daughter with her. She she sort of walked into the lift without really looking... she was sort looking down at the floor, looking at her daughter and then saw me sat in my chair with no legs ... and jumped out of her skin, grabbed her child, wrapped her child in her sa sari and barely stayed in the bloody lift with me ... she was absolutely petrified and really didn't want her daughter to look or see or in any way have contact with me” Joey

For some, this affected their confidence and willingness to show their prosthesis or stump in public:

*“It could be sweltering and I would have still gone out in a pair of jeans”
Callum*

Participants also talked about receiving “*sympathy*” (George) from society which, although they understood why, they did not like, as they wanted to be independent:

*“I’m a grown man, I should be able to do the the the basic kind of things”
Zak*

Equally, participants felt this sympathy was because others assumed that they must be “*depressed*” (George). Participants’ narratives implied a reduction in negative societal reactions, which they felt reflected an increase in awareness and knowledge, partly due to the “*Paralympics*” (Olivia), “*Invictus games*” (Zak) and “*media*” (Joey).

Participants wanted people to ask questions and to educate society:

“I’m always really happy to to to answer any questions cause I think ... we have to play our part as well as as amputees ... to make sure urr society know what we going through” George

Children

The ‘Progressive’ and ‘Tragedy’ narratives described the positive impact of children, as interactions were enjoyable and fun. Children appeared less judgemental, and more inquisitive than adults in society, as they were interested, willing to ask questions, and did not stare for long:

“kids are the best ... because they are so naturally inquisitive and you know everything is new to them ...they are interested for a few minutes and then they move on to something else which is more interesting” Olivia

Medical Professionals

In the ‘Overcoming Adversity’ narratives, individuals seemed to have worked alongside medical professionals and were grateful for the care they received:

“but the nurses there they they took care of me and and the doctors just and one of the nurses I I I don’t know she is re I left urm the intensive care I’ve seen her before but she really really helped me” George

In the ‘Continuing Adversity’ narrative this was omitted or not present. Callum felt he was treated with “*utmost professionalism*” in the army, but proceeded to say this was “*not enough*”. This suggests that he had some positive experiences which were overshadowed by the negatives.

It was also through this relationship that the reality of their injury was recognised. For some, this occurred abruptly:

*“I said ‘O god I’ve broke my legs I’ve broke my legs I’ve broke my fucking legs’ and she said *laughs* she she turned round she said ‘Joey Joey you’ve not broken your legs, you’ve not got any fucking legs’ and at that I sort of stopped crying” Joey*

While for others, there was more concern about how to approach it. Working alongside professionals appeared important in allowing amputees to move forward, accept their injuries and develop a positive self-perception.

Organisations

Organisations, primarily military charities, also positively influenced the narratives. They offered amputees the opportunity to try out new things, continue their rehabilitation in a number of testing environments and to complete activities they would not have otherwise done:

“I went skiing within 3 months of losing my leg” Zak

This positive social identity helped to build their self-confidence and identity separate to being disabled:

“they always believe in me ... more than I believe in myself” George

Ex-military Community

The importance of links with ex-military personnel varied. The ‘Self-Efficacy’ stories described fewer connections with ex-military personnel, as well as distancing themselves from them, due to differing approaches to civilian life:

“they think civilian life owes them something and it doesn’t” Joey

Alternatively, the ‘Progressive’ and ‘Tragedy’ narratives spoke about the positive impact of the ex-military community, in particular, the “*black humour*” (Olivia) or “*banter*” (Callum):

“ex-military guys their mentality is you you idiot ... you say you can’t well put your leg on” Callum

Also noted was the ex-military community having a better understanding or acceptance of their situation:

“perhaps it wasn’t quite as much as a shock for them” Olivia

This demonstrates the importance to some individuals of maintaining connections with the military, whilst those who had higher perceived self-efficacy preferred to distance themselves.

Family

Both ‘Progressive’ narratives described how initially those close to them seemed angry. Their fathers in particular had a “*paternal protective instinct*” (Olivia):

“it offended him that what someone had done to his son” Zak

“it shouldn't have happened to his little girl” Olivia

Equally, Zak's ex-wife was “*repulsed*” by his leg which detrimentally affected his development of a positive sense of self:

“she didn't like how I looked ... urm because urr at the time you know massive scarring its red its angry”

“that must have put something in there that thought shit I am different ... if someone that's always been near and dear ... can't stand looking at it”

Four of the narratives briefly described support from their family. This helped them feel less alone and promoted their independence:

“I was in a wheelchair and urm [mum] always wanted to push me around ... I told her listen I can do it ... myself ... and afterwards she she understands and and that when I was at the hospital when everyone anyone that comes in to to to come and visit me and just to see how ur she she always warned them listen don't touch his wheelchair ... cause he he doesn't want no one to give him a hand” George

Discussion

The results show ex-military amputees adapted parts of their self-concept and developed ways to cope with what they experienced as negative societal reactions. All participants had progressed, demonstrating post-traumatic growth; however, the plot themes fell into two distinct categories (‘Overcoming Adversity’ and ‘Continued Adversity’), depending on the overall mood and progression of the narrative. All participants demonstrated a sense of autonomy, as well as describing the impact of other people on their adjustment. The three plot axes (‘Self-Efficacy’, ‘Progressive’ and ‘Tragedy’), demonstrate the differences between how participants perceived themselves and the relative importance of other people on their experiences.

How do the person's self-perceptions and experiences of societal perceptions affect identity?

When individuals are able to associate with a larger number of groups, their identity becomes more complex, leaving them vulnerable to potential distress (Cote & Levine, 2002). In keeping with crip theory (McRuer, 2006), all participants identified as disabled. However, those with 'Overcoming Adversity' narratives extended their identity outside of the military and being disabled, creating new possibilities and the opportunity to defy societal expectations. Although they felt society expected them to view their disability negatively, they incorporated it into their identity and were proud of their achievements. Likewise, being an amputee brought about a new group they could identify and develop close bonds with, maintaining their sense of belonging as they left the military. Conversely, in the 'Continued Adversity' narrative, the association with more groups was not easily adjusted to, potentially because his military identity was more positively perceived.

Higgins (1987) suggested that psychological distress increases with discrepancies between the ideal, ought and actual self. This was apparent in the 'Tragedy' story, as Callum's ideal self remained in his military identity. His ought self involved physical activities, such as running and football, which he could not do. His actual self was perceived more negatively and low in confidence, similar to how he described himself in his childhood. Callum was unable to be his ideal or ought self, creating a continual struggle. The maintenance of his ideal and ought self at an unachievable level appeared predominantly due to Callum's own expectations, as he recognised his sons, wife and friends did not mind. There were also a number of strong external influences such as his stepfather, perceived rejection by the army and negative societal reactions, which may have contributed to his continued negative perception. In the 'Overcoming

Adversity' narratives, individuals either adjusted their ideal and ought self to be more achievable, or had pre-planned their civilian identity, which facilitated their transition. Equally, some aspects of their military identity continued, such as fitness and adrenaline seeking activities, reducing the discrepancy between their ideal, ought and actual self. These adjustments were less prevalent in Callum's narrative and may have contributed to his continued psychological distress.

How do ex-military amputees' narratives suggest they perceive themselves?

The 'Overcoming Adversity' narrative plot theme suggested individuals had a largely positive view of themselves and their experiences following amputation, with glimpses of negatives. In contrast, the 'Continued Adversity' narrative was predominantly negative, with glimpses of positives. When positive progressions were discussed, these were often accompanied by negatives which seemed to negate the progress Callum had made. He had not achieved less than the other participants, and in some respects, had achieved more, as he had stable long-term employment and a family. His own perception seemed to maintain his psychological distress, showing the importance of an individual's self-perception on their mental health.

Self-perceptions were predominantly discussed at the beginning and end of narratives, reflecting their old self-perception in the military and then their newer self-perception as a civilian amputee. Phases 3-7, immediately following amputation, were largely devoid of self-descriptions. This may be because, during this time, participants were searching for a new identity and unable to explain it. These stages also contained a higher threat to the amputees' lives and therefore heightened emotions, which may have overshadowed their perceptions of themselves. Finally, it is possible that prior to

their decision to view their injuries and themselves more positively, amputees had a more negative self-perception, which they were less willing to discuss.

The 'Choice' phase helped participants to move forward and perceive themselves positively. This was only present in the 'Overcoming Adversity' narratives. Prior to this phase, participants experienced extreme panic, anger and despair. Having accepted their amputation, they appeared more hopeful for the future, the things they could achieve and their new identity. This is consistent with Kübler-Ross (1969), who suggested five stages of grief, including anger and depression before acceptance.

Equally, acceptance has been recognised as an important turning point in adjustment (Adams, Hayes, & Hopson, 1977). Therefore, this perceived choice seemed to aid the development of their narratives and them to move forward, however, it did not have a large impact on the progression of the narrative after this point. This demonstrates the importance of supporting individuals to grieve for their prior identity, but also to accept their loss to create new possibilities.

The 'Perspective' phase was also an important turning point. Prior to this, individuals described feelings of sadness and pity, which maintained their negative self-perception. Yet following this, they considered how it could have been worse, which allowed them to feel more hopeful and grateful. This appeared to be similar to the appreciation for life domain described by post-traumatic growth theory, which describes individuals as feeling "lucky". Although this phase appeared in all stories, prior to the grouping of narratives, this phase had appeared at different points within the individual narratives. Having perspective early on, right from the point at which they incurred their injuries, appeared to further facilitate adjustment. Individuals who inputted into their amputation also appeared to be grateful to have been involved and aware of that decision. This appeared to increase their post-traumatic growth in the

appreciation for life domain as they felt lucky to have been able to be a part of the decision to amputate their limb. This could be another factor affecting Callum's adjustment, as the 'Perspective' phase for him came later, when he saw amputees on television. This phase also included seeing other amputees, which helped them to feel less alone and bitter. Callum may have felt more alone, having left the army when there were few amputees, removing his feeling of belonging, identity and positive self-perception. These two phases seemed particularly important in allowing individuals to begin to adapt to the changes and for their narratives to begin to show post-traumatic growth.

Those who had been infantry soldiers described fewer difficulties assimilating into civilian life than those who were engineers; in contrast, other research suggests those with transferable skills adjust easier (Spiegel & Shultz, 2003). Research has, however, found that high psychological flexibility reduces psychological distress, as well as aiding adjustment to significant life stressors and a range of health conditions (Hulbert-Williams, Storey, & Wilson, 2015; Vowles, McCracken, Sowden, & Ashworth, 2014; Whiting, Deane, Ciarrochi, McLeod, & Simpson, 2014; Scott, Hann, & McCracken, 2016; Wiggs & Drake, 2016). These studies found that Acceptance and Commitment Therapy (ACT) increased psychological flexibility therefore reducing distress. Those who were infantry soldiers may have had higher psychological flexibility, demonstrated by their greater willingness to try new activities, which aided their adaptation. Consequently, ACT could facilitate psychological flexibility in ex-military amputees who are struggling to adjust.

The 'Reflection' phase of the narratives helped individuals to develop a more positive self-perception. Consistent with previous research, participants felt stronger and more resilient, demonstrating post-traumatic growth (Calhoun & Tedeschi, 2014). Most

commonly, individuals reported changes in keeping with the new possibilities domain as they were offered different opportunities and activities following amputation, which would not have been as readily available to them had they remained able-bodied.

Participants found that ruminating on their difficulties, or feeling sorry for themselves, hindered their progress (Benetato, 2011). This suggests clinicians need to help ex-military amputees to reflect on their resilience and use cognitive or behavioural techniques to reduce rumination.

In keeping with the post-traumatic growth literature immediately following injury the participants' experiences seemed more negative and presented a greater struggle (Janoff-Bulman, 2006). However, as their narratives and time progressed individuals were more able to find meaning in their experiences and positive aspects to their lives. The 'New Life' phase was cyclical as difficulties arose. This highlights the importance of ongoing support for amputees as they encounter different barriers. For instance, Callum had recently retired, which brought new challenges and changes to his identity. As the number of amputees has increased with recent conflicts, further research to consider ways of supporting individuals throughout their life is important.

How do ex-military amputees' narratives suggest they feel they are perceived by those around them and society?

The character analysis showed society viewed disability negatively and the expectations of ex-military amputees were low. Participants described how people felt sorry for them and expected them to be struggling psychologically. This societal ought self was rejected in all the narratives. For the 'Self-Efficacy' stories, this appeared to be predominantly from their own determination; however, all narratives described the

importance of organisations that boosted their confidence and perceived them positively.

Positive alliances with others aided their progression. For the 'Overcoming Adversity' stories, this was apparent as soon as they received help. They expressed gratitude for the ongoing support they had received from professionals, individuals they knew and organisations. There was a strong sense that they were working alongside others to develop a positive perception of themselves, but also that those around them provided a positive societal influence. Alternatively, in the 'Continued Adversity' narrative, it seemed Callum encountered more negative perceptions of amputees and needed to be extremely resilient to find his own rehabilitation and employment. Later in his narrative, he described the positive influence of organisations that modelled an obtainable and positive social identity. This shows individuals having what they perceive as positive reactions from members of society early facilitates adjustment and a positive self-perception.

Family members were often present early; however their role during the narratives was largely neglected. This meant that post-traumatic growth from the development of closer and more intimate relationships was largely absent from participants' narratives. Three of the participants got divorced following their amputation which may have made discussing the influence of family members difficult. Their family may also have had similar views to themselves making their relative influence harder to separate. Finally, it may be that their family influenced them less than organisations, professionals and their own perceptions.

In keeping with the findings of Singh *et al.* (2009) participants described increased anxiety following discharge from rehabilitation, due to concerns about other people's reactions. This demonstrates the strong influence others have over an individual's

mental health, along with the importance of ongoing support following rehabilitation. Although the continued support of organisations was recognised, many had concerns about the wider community, suggesting a need for greater systemic support upon discharge from rehabilitation.

Research has considered the impact of societal perceptions on military personnel (Gribble *et al.*, 2012). They asked members of the public to rate their opinion of the UK Armed Forces from “*very low*” to “*very high*”, and their degree of respect from “*no respect at all*” to “*a great deal*” (p.141). They stated:

“Nine out of ten people declare their support for Armed Service personnel who have recently served in Iraq and Afghanistan regardless of their opinions about the actual military deployment” p.138

They conclude that the UK public are not supportive of recent military missions, but are supportive of service personnel. Alternatively, the narratives of ex-military amputees suggest that although they received support from the UK public, they also experienced a number of negative reactions. Similarly, some participants felt that the US public had a better understanding of the military and appeared more supportive. The results show the impact of other people on ex-military amputee’s confidence, self-esteem and identity. The reason for the disparity between the results of this study and the findings of Gribble *et al.* (2012) are unclear. It is possible that the UK public feel they are supportive of veterans but are unable to convey this support in a way which is perceived as supportive by veterans. This study also researched ex-military amputees and so negative societal reactions towards amputees and disability may have also confounded the findings of this study. Further research could try to compare veteran and societal views to investigate this possible disparity and consider ways of alleviating it. Teaching around societal perceptions makes people more aware of their

views, then able to adapt them, when presented with alternative evidence (Gehlbach, Young, & Roan, 2012). Ex-military amputees conveyed a willingness to connect with civilians to help society to understand the challenges they face and how they can be supported. Greater psychoeducation around the impact of others on the development, or adaptation, of identity could therefore help. Community Psychology could also increase integration and awareness in society. Recruiting participants was particularly difficult in this study, due to a number of barriers to advertising, but also civilians' concerns about amputees' willingness to share their stories. The results suggest amputees do not share their concerns. The differing results to Gribble *et al.* (2012), demonstrate the importance of considering ex-military personnel's perceptions of how they are perceived and supported by society, as well as societal views.

Strengths and Limitations

This study was the first to consider ex-military amputees' narratives, their identity and the influence of others. Narrative analysis allowed the participants to choose what they spoke about, but also for their perceptions to be explored thoroughly. Although this was important, a more structured approach could have helped to guide participants and increase the perspectives given on certain phenomena, such as family. Equally, narrative analysis requires phenomena to be organised into phases which occur chronologically. However, for some individuals, the 'Perspective' phase appeared at multiple time points in their narratives, which may have been better expressed through thematic methods. Due to the individualistic nature of adjustment, and small sample size, the results are unlikely to fully reflect the range of experiences ex-military amputees have. All participants had lower limb amputations, increasing the homogeneity of the sample, however, the identity and self-perceptions of those with

upper limb amputations may differ. These findings are also subject to the researcher's own assumptions and socio-political biases. In particular these included the researcher's own dilemmas in wanting to promote peaceful and constructive ways of managing conflict, while also recognising the wider political context in which we live and the potential threats to individuals lives. Equally, the researcher entered the profession of Clinical Psychology with a drive to help other people and with the aim of seeing the positive aspects of all individuals, regardless of their mental health, disability or physical appearance. Biases related to the military, trauma and disability were considered reflexively and acknowledged explicitly during supervision and reflective practice research groups, in order to try and mitigate the impact they had on the overall findings. Further details of these can be found in the reflective statement in Appendix T. However, these biases can never fully eradicated and therefore future researchers would also need to consider the impact of their own biases and ways to mitigate their impact on further research in this area.

Clinical Implications and Future Research

Overall, the narratives demonstrated that the participants in this study were largely satisfied with the support they had received, despite experiencing mental and physical health difficulties. Individuals appeared to have successfully transitioned to the civilian world despite some anxieties and concerns about the transition or changes that amputation had brought to their lives. Although their amputation was not planned, those who were offered rehabilitation by the army prior to their discharge appeared more able to adjust and build a new life for themselves. Ongoing support from charities also commonly facilitated participants' adjustment. Participants' narratives did, however, also show that throughout their lives new challenges will arise and that

for some individuals further mental or physical health support could be required. The researchers have therefore also considered what clinicians outside of the military environment could consider should these individuals need further support following their discharge from the military. However, the implications discussed here are not limited to those working outside the military context and could therefore be implemented in military and non-military settings working with ex-military amputees. Equally, as these individuals are likely to be involved with a number of different mental and physical health providers, strong communication and liaison between these providers is important to allow services to offer a high level of support throughout these individuals' lives. Greater psychological flexibility appeared to generate new possibilities which may help to increase their perceived quality of life. The 'Choice' phase was also a critical turning point which allowed individuals to accept their injury. As ACT has been shown to promote psychological flexibility and acceptance, which facilitate adjustment (Hulbert-Williams *et al.*, 2015; Wiggs & Drake, 2016), clinicians should consider using ACT with ex-military amputees. The effectiveness of ACT could also be explored in future research. Grief counselling, which can help amputees move through the stages of grief towards acceptance, may also facilitate adjustment. Narratives also appeared to be a useful way of capturing the participants' experiences and the interplay between their life story, identity and mental health. Narrative therapy could therefore be considered for individuals who are struggling to integrate their life story and adapt it to the changes. Equally, those whose life story appears to contribute to their mental health remaining low could be given the opportunity to consider alternative narratives and life-stories which incorporate more positive perspectives. Clinicians should be aware that ongoing encouragement and positive perceptions of amputees, despite their disability, appears to aid adjustment. Clinicians should also be

aware of their own socio-political biases which may arise when working with ex-military amputees and the impact this might have on the support they are able to offer. Finally, greater individual and systemic support, when returning to the community, as well as during transitional times in their lives, is important. Future research could focus more on how individuals are able to adapt their identity and factors which affect this. Research exploring the positive ways amputees have been able to integrate into society, and how this is facilitated, could also guide potential community interventions. Finally, future research could further explore the role of the family and consider what support they could benefit from to overcome their grief.

Conclusion

Ex-military amputees have to navigate a number of difficult changes when transitioning from the military to civilian life and in adapting to becoming an amputee. Their narratives suggest the possibility of maintaining some of their military identity, whilst also incorporating new aspects to maintain a positive self-perception. For some this was easier, due to their perceived self-efficacy and supportive relationships. Participants' narratives also showed elements of post-traumatic growth following amputation. Participants perceived societal perceptions as predominantly negative, however, wanted to educate people to try and change this. Services should consider how they support ex-military amputees integrating back into society, in order to reduce anxiety at this time. Equally, systemic interventions could promote more positive societal perceptions.

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Declaration of Conflicting Interests

None

References

- Adams, J. D., Hayes, J., & Hopson, B. (1977). *Transition: Understanding & managing personal change*. New York: Allanheld & Schram. doi:10.1007/978-1-349-16551-3_11
- Beal, C. C. (2013). Keeping the story together: A holistic approach to narrative analysis. *Journal of Research in Nursing, 18*(8), 692-704. doi:10.1177/1744987113481781
- Benetato, B. B. (2011). Posttraumatic growth among Operation Enduring Freedom and Operation Iraqi Freedom amputees. *Journal of Nursing Scholarship, 43*(4), 412-420. doi:10.1111/j.1547-5069.2011.01421.x
- Bleakley, A. (2005). Stories as data, data as stories: Making sense of narrative inquiry in clinical education. *Medical Education, 39*(5), 534-540. doi:10.1111/j.1365-2929.2005.02126.x
- Caddick, N., & Smith, B. (2014). The impact of sport and physical activity on the well-being of combat veterans: A systematic review. *Psychology of Sport and Exercise, 15*(1), 9-18. doi:10.1016/j.psychsport.2013.09.011
- Calhoun, L. G., & Tedeschi, R. G. (2014). *Handbook of posttraumatic growth: Research and practice*. New York: Psychology Press. doi:10.4324/9781315805597
- Cater, J. K. (2012). Traumatic amputation: Psychosocial adjustment of six army women to loss of one or more limbs. *Journal of Rehabilitation Research & Development, 49*(10), 1443-1456. doi: 10.1682/JRRD.2011.12.0228

- Cote, J. E., & Levine, C. G. (2002). *Identity, formation, agency, and culture: A social psychological synthesis*. Mahwah, New Jersey: Lawrence Erlbaum.
doi:10.4324/9781410612199
- Dean, E. T. (1992). The myth of the troubled and scorned Vietnam veteran. *Journal of American Studies*, 26(1), 59-74. doi:10.1017/s0021875800030218
- Desmond, D. M. (2007). Coping, affective distress, and psychosocial adjustment among people with traumatic upper limb amputations. *Journal of Psychosomatic Research*, 62(1), 15-21. doi:10.1016/j.jpsychores.2006.07.027
- Frye, N. (1957). *Anatomy of Criticism*. Princeton, New Jersey: Princeton University Press.
doi:10.2307/428058
- Gehlbach, H., Young, L. V., & Roan, L. K. (2012). Teaching social perspective taking: How educators might learn from the army. *Educational Psychology*, 32(3), 295-309. doi:10.1080/01443410.2011.652807
- Gergen, K. J., & Gergen, M. M. (1988). Narrative and the self as relationship. *Advances in Experimental Social Psychology*, 21, 17-56.
- Gribble, R., Park, A., Clergy, E., Curtice, J., Phillips, M., & Utting, D. (2012). *The UK's Armed Forces: public support for the troops but not their missions*. Retrieved from http://www.bsa.natcen.ac.uk/media/1150/bsa29_armed_forces.pdf
- Gunawardena, N., Senevirathne, R., & Athauda, T. (2007). Mental health outcome of unilateral lower limb amputee soldiers in two districts of Sri Lanka. *International Journal of Social Psychiatry*, 53(2), 135-147. doi:10.1177/0020764006075029

- Herman, A., & Yarwood, R. (2014). From services to civilian: The geographies of veterans' post-military lives. *Geoforum*, 53, 41-50.
doi:10.1016/j.geoforum.2014.02.001
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319-340. doi:10.1037//0033-295x.94.3.319
- Horgan, O., & MacLachlan, M. (2004). Psychosocial adjustment to lower-limb amputation: A review. *Disability and Rehabilitation*, 26(14-15), 837-850. doi: 10.1080/09638280410001708869
- Hulbert-Williams, N. J., Storey, L., & Wilson, K. G. (2015). Psychological interventions for patients with cancer: Psychological flexibility and the potential utility of acceptance and commitment therapy. *European Journal of Cancer Care*, 24(1), 15-27. doi:10.1111/ecc.12223
- Jovchelovitch, S., & Bauer, M. W. (2000). *Narrative interviewing*. London: London School of Economics Research Online. Retrieved from <http://eprints.lse.ac.uk/2633>
- Knežević, A., Salamon, T., Milankov, M., Ninković, S., Jeremić-Knežević, M., & Tomašević-Todorović, S. (2015). Assessment of quality of life in patients after lower limb amputation. *Medicinski Pregled*, 68(3-4), 103-108. doi: 10.2298/MPNS1504103K
- Kübler-Ross, E. (1969). *On death and dying*. New York: The Macmillan Company.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative research: Reading, analysis, and interpretation*. Thousand Oaks, California: SAGE.

- McAdams, D. P., & McLean, K. C. (2013). Narrative identity. *Current Directions in Psychological Science*, 22(3), 233-238. doi: 10.1007/springerreference_223445
- McRuer, R. (2006). *Crip theory: Cultural signs of queerness and disability*. New York: New York University Press. doi:10.1080/15017410701880122
- Ministry of Defence. (2014). *Quarterly Afghanistan and Iraq Amputation Statistic October 2001 – 31December2014*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/397989/Annex_A__20150129_DAY-RELEASE_Quarterly_Afghanistan_and_Iraq_Amputation_Statistics_U.pdf
- Pals, J. L. (2006). *Constructing the “springboard effect”: Causal connections, self making, and growth within the life story*. In D. P. McAdams, R. Josselson, & A. Lieblich (Eds.), *Identity and story: Creating self in narrative* (pp. 175–199). Washington, DC: APA Books. doi: 10.1037/11414-008
- Phelps, L. F., Williams, R. M., Raichle, K. A., Turner, A. P., & Ehde, D. M. (2008). The importance of cognitive processing to adjustment in the 1st year following amputation. *Rehabilitation Psychology*, 53(1), 28-38. doi:10.1037/0090-5550.53.1.28
- Reznick, J. S. (2008). Beyond war and military medicine: Social factors in the development of prosthetics. *Archives of Physical Medicine and Rehabilitation*, 89(1), 188-193. doi:10.1016/j.apmr.2007.08.148
- Scott, W., Hann, K. E., & McCracken, L. M. (2016). A comprehensive examination of changes in psychological flexibility following acceptance and commitment therapy for chronic pain. *Journal of Contemporary Psychotherapy*, 46(3), 139-148. doi: 10.1007/s10879-016-9328-5

- Signor, A. (2014). *10 Advances In Medical Techonology From The Global War On Terror*. Retrieved from [http://taskandpurpose.com/10-medical-advancements - from-the-iraq-and-afghanistan-wars/](http://taskandpurpose.com/10-medical-advancements-from-the-iraq-and-afghanistan-wars/)
- Singer, J. A. (2004). Narrative identity and meaning making across the adult lifespan: An introduction. *Journal of Personality*, 72(3), 437-459.
doi:10.1111/j.0022-3506.2004.00268.x
- Singer, J. A., Blagov, P., Berry, M., & Oost, K. M. (2013). Self-defining memories, scripts, and the life story: Narrative identity in personality and psychotherapy. *Journal of personality*, 81(6), 569-582. doi:10.1111/jopy.12005
- Singh, R., Ripley, D., Pentland, B., Todd, I., Hunter, J., Hutton, L., & Philip, A. (2009). Depression and anxiety symptoms after lower limb amputation: The rise and fall. *Clinical Rehabilitation*, 23(3), 281-286. doi:10.1177/0269215508094710
- Spiegel, P. E., & Shultz, K. S. (2003). The influence of preretirement planning and transferability of skills on naval officers' retirement satisfaction and adjustment. *Military Psychology*, 15(4), 285-307. doi:10.1207/S15327876MP1504_3
- Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of traumatic stress*, 9(3), 455-471. doi:10.1007/bf02103658
- Valizadeh, S., Dadkhah, B., Mohammadi, E., & Hassankhani, H. (2014). The perception of trauma patients from social support in adjustment to lower-limb amputation: A qualitative study. *Indian Journal of Palliative Care*, 20(3), 229-238.
doi:10.4103/0973-1075.138401
- Vowles, K. E., McCracken, L. M., Sowden, G., & Ashworth, J. (2014). Psychological flexibility in coping with chronic pain: Further examination of the brief pain coping

inventory-2. *The Clinical Journal of Pain*, 30(4), 324-330.

doi:10.1097/AJP.0b013e31829ea187

Whiting, D. L., Deane, F., Ciarrochi, J., McLeod, H., & Simpson, G. (2014). Exploring the relationship between cognitive flexibility and psychological flexibility after acquired brain injury. *Brain Injury*, 28 (5-6), 646-647.

doi:10.3109/02699052.2014.892379

Wiggs, K. A., & Drake, C. E. (2016). Building psychological flexibility to mitigate adjustment disorder: Assessing treatment progress with a measure of treatment processes. *Clinical Case Studies*, 15(1), 18-34. doi:10.1177/1534650115585387

Part Three: Appendices

Appendix A – Journal of Social and Clinical Psychology Author Guidelines

The Journal of Social and Clinical Psychology is devoted to the application of theory

and research from social psychology toward the better understanding of human

adaptation and adjustment, including both the alleviation of psychological problems

and distress (e.g., psychopathology) and the enhancement of psychological well-being

among the psychologically healthy. Topics of interest include (but are not limited to)

traditionally defined psychopathology (e.g., depression), common emotional and

behavioral problems in living (e.g., conflicts in close relationships), the enhancement

of subjective well-being, and the processes of psychological change in everyday life

(e.g., self-regulation) and professional settings (e.g., psychotherapy and counseling).

Articles reporting the results of theory-driven empirical research are given priority, but

theoretical and review articles are also welcome. Articles describing the development

of new scales (personality or otherwise) or the revision of existing scales are not

appropriate.

All submissions must be made electronically (preferably in Microsoft Word format) to

Thomas E. Joiner at joiner@psy.fsu.edu. Only original articles will be considered.

Articles should not exceed 8,000 words (text and references). Exceptions may be made

for reports of multiple studies. Abstracts should not exceed 200 words. Authors

desiring an anonymous review should request this in the submission letter. In such

cases identifying information about the authors and their affiliations should appear

only on a cover page.

TABLES should be submitted in Excel. Tables formatted in Microsoft Word's Table

function are also acceptable. (Tables should not be submitted using tabs, returns, or

spaces as formatting tools.)

FIGURES must be submitted separately as graphic files (in order of preference: tif, eps, jpg, bmp, gif; note that PowerPoint is not acceptable) in the highest possible resolution. Figure caption text should be included in the article's Microsoft word file. All figures must be in black & white.

PERMISSIONS: Contributors are responsible for obtaining permission from copyright owners if they use an illustration, table, or lengthy quote (100+ words) that has been published elsewhere. Contributors should write both the publisher and author of such material, requesting nonexclusive world rights in all languages for use in the article and in all future editions of it.

REFERENCES: Authors should consult the publication manual of the American Psychological Association for rules on format and style. All research papers submitted to the Journal of Social and Clinical Psychology must conform to the ethical standards of the American Psychological Association. Articles should be written in nonsexist language. Any manuscripts with references that are incorrectly formatted will be returned by the publisher for revision.

SAMPLE REFERENCES

Davis, C. G., & McKearney, J. M. (2003). How do people grow from their experience with trauma or loss? *Journal of Social & Clinical Psychology, 22*, 477-492.

Dweck, C., & Wortman, C. (1982). Learned helplessness, anxiety and achievement. In H. Kron & L. Laux (Eds.), *Achievement, stress, and anxiety* (pp. 93-125).

Washington, DC: Hemisphere Publishing Group.

Levy, M. L., Cummings, J. L., Fairbanks, L. A., Masterman, D., Miller, B. L., Craig, A. H., et al. (1998). Apathy is not depression. *Journal of Neuropsychiatry and Clinical Neurosciences, 10*, 314-319.

Appendix B – Data Extraction Tool

Title	
Authors	
Year	
Country	
Aims	
Sample size	
Sampling method	
Study Design	
Study Methodology	
Measures or data collection	
Main findings: Themes, Facilitators or Barriers to adjustment	
Quality Score	

Appendix C – Mixed Methods Appraisal Tool

Types of mixed methods study components or primary studies	Methodological quality criteria (see tutorial for definitions and examples)	Responses			
		Yes	No	Can't tell	Comments
Screening questions (for all types)	• Are there clear qualitative and quantitative research questions (or objectives*), or a clear mixed methods question (or objective*)?				
	• Do the collected data allow address the research question (objective)? E. g., consider whether the follow-up period is long enough for the outcome to occur (for longitudinal studies or study components).				
	<i>Further appraisal may be not feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.</i>				
1. Qualitative	1.1. Are the sources of qualitative data (archives, documents, informants, observations) relevant to address the research question (objective)?				
	1.2. Is the process for analyzing qualitative data relevant to address the research question (objective)?				
	1.3. Is appropriate consideration given to how findings relate to the context, e.g., the setting, in which the data were collected?				
	1.4. Is appropriate consideration given to how findings relate to researchers' influence, e.g., through their interactions with participants?				
2. Quantitative randomized controlled (trials)	2.1. Is there a clear description of the randomization (or an appropriate sequence generation)?				
	2.2. Is there a clear description of the allocation concealment (or blinding when applicable)?				
	2.3. Are there complete outcome data (80% or above)?				
	2.4. Is there low withdrawal/drop-out (below 20%)?				
3. Quantitative non-randomized	3.1. Are participants (organizations) recruited in a way that minimizes selection bias?				
	3.2. Are measurements appropriate (clear origin, or validity known, or standard instrument; and absence of contamination between groups when appropriate) regarding the exposure/intervention and outcomes?				
	3.3. In the groups being compared (exposed vs. non-exposed; with intervention vs. without; cases vs. controls), are the participants comparable, or do researchers take into account (control for) the difference between these groups?				
	3.4. Are there complete outcome data (80% or above), and, when applicable, an acceptable response rate (60% or above), or an acceptable follow-up rate for cohort studies (depending on the duration of follow-up)?				
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the quantitative research question (quantitative aspect of the mixed methods question)?				
	4.2. Is the sample representative of the population understudy?				
	4.3. Are measurements appropriate (clear origin, or validity known, or standard instrument)?				
	4.4. Is there an acceptable response rate (60% or above)?				
5. Mixed methods	5.1. Is the mixed methods research design relevant to address the qualitative and quantitative research questions (or objectives), or the qualitative and quantitative aspects of the mixed methods question (or objective)?				
	5.2. Is the integration of qualitative and quantitative data (or results*) relevant to address the research question (objective)?				
	5.3. Is appropriate consideration given to the limitations associated with this integration, e.g., the divergence of qualitative and quantitative data (or results*) in a triangulation design?				
	<i>Criteria for the qualitative component (1.1 to 1.4), and appropriate criteria for the quantitative component (2.1 to 2.4, or 3.1 to 3.4, or 4.1 to 4.4), must be also applied.</i>				

*These two items are not considered as double-barreled items since in mixed methods research, (1) there may be research questions (quantitative research) or research objectives (qualitative research), and (2) data may be integrated, and/or qualitative findings and quantitative results can be integrated.

Appendix D – Mixed Methods Appraisal Tool Ratings. *Rated by independent researcher. 0=No, 1=Yes, 2=Can't tell

Study	Qualitative				Quantitative RCT				Quantitative non-randomised				Quantitative descriptive			Mixed methods				Score
	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	
Ahern et al 2015	1	1	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75%
Brunger et al 2013	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%
Demers 2011	1	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50%
Demers 2013*	1	1	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75%
Herman & Yarwood 2014	1	2	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25%
Black 2010	-	-	-	-	-	-	-	-	-	-	-	-	1	2	0	0	-	-	-	25%
Fuller & Redfering 1976	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	1	-	-	-	25%
Larson & Norman 2014	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	0	-	-	-	50%
MacLean et al 2014	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	1	-	-	-	75%
O'Neill & Fontaine 1973	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	1	-	-	-	50%
Sayer et al 2010*	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	-	-	-	100%
Spiegel & Shultz 2003	-	-	-	-	-	-	-	-	-	-	-	-	1	2	0	1	-	-	-	50%
Taylor et al 2007*	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	1	-	-	-	75%
Schonfeld et al 2015*	1	2	0	0	-	-	-	-	-	-	-	-	1	2	1	2	1	0	2	50%
Strayer & Ellenhorn 1975	1	1	0	0	-	-	-	-	-	-	-	-	1	2	1	2	1	1	0	50%

**Appendix E – Adapted National Institute for Health and Care Excellence
Checklist for Qualitative Studies**

Study identification:		
Guidance topic:	Key research question/aim:	
Checklist completed by:		
Theoretical approach		
<p>1. Is a qualitative approach appropriate?</p> <p>For example:</p> <ul style="list-style-type: none"> • Does the research question seek to understand processes or structures, or illuminate subjective experiences or meanings? • Could a quantitative approach better have addressed the research question? 	<p>Appropriate</p> <p>Inappropriate</p> <p>Not sure</p>	<p>Comments:</p>
<p>2. Is the study clear in what it seeks to do?</p> <p>For example:</p> <ul style="list-style-type: none"> • Is the purpose of the study discussed – aims/objectives/research question/s? • Is there adequate/appropriate reference to the literature? 	<p>Clear</p> <p>Unclear</p> <p>Mixed</p>	<p>Comments:</p>

<ul style="list-style-type: none"> • Are underpinning values/assumptions/theory discussed? 		
<p>Study design</p>		
<p>3. How defensible/rigorous is the research design/methodology?</p> <p>For example:</p> <ul style="list-style-type: none"> • Is the design appropriate to the research question? • Is a rationale given for using a qualitative approach? • Are there clear accounts of the rationale/justification for the sampling, data collection and data analysis techniques used? • Is the selection of cases/sampling strategy theoretically justified? 	<p>Defensible</p> <p>Indefensible</p> <p>Not sure</p>	<p>Comments:</p>
<p>Data collection</p>		
<p>4. How well was the data collection carried out?</p> <p>For example:</p> <ul style="list-style-type: none"> • Are the data collection methods clearly described? • Were the appropriate data collected to address the research question? 	<p>Appropriately</p> <p>Inappropriately</p> <p>Not sure/inadequately reported</p>	<p>Comments:</p>

<ul style="list-style-type: none"> Was the data collection and record keeping systematic? 		
Trustworthiness		
<p>5. Is the role of the researcher clearly described?</p> <p>For example:</p> <ul style="list-style-type: none"> Has the relationship between the researcher and the participants been adequately considered? Does the paper describe how the research was explained and presented to the participants? 	<p>Clearly described</p> <p>Unclear</p> <p>Not described</p>	<p>Comments:</p>
<p>6. Is the context clearly described?</p> <p>For example:</p> <ul style="list-style-type: none"> Are the characteristics of the participants and settings clearly defined? Were observations made in a sufficient variety of circumstances Was context bias considered 	<p>Clear</p> <p>Unclear</p> <p>Not sure</p>	<p>Comments:</p>
<p>7. Were the methods reliable?</p> <p>For example:</p> <ul style="list-style-type: none"> Was data collected by more than 1 method? 	<p>Reliable</p> <p>Unreliable</p> <p>Not sure</p>	<p>Comments:</p>

<ul style="list-style-type: none"> • Is there justification for triangulation, or for not triangulating? • Do the methods investigate what they claim to? 		
Analysis		
<p>8. Is the data analysis sufficiently rigorous?</p> <p>For example:</p> <ul style="list-style-type: none"> • Is the procedure explicit – i.e. is it clear how the data was analysed to arrive at the results? • How systematic is the analysis, is the procedure reliable/dependable? • Is it clear how the themes and concepts were derived from the data? 	<p>Rigorous</p> <p>Not rigorous</p> <p>Not sure/not reported</p>	<p>Comments:</p>
<p>9. Is the data 'rich'?</p> <p>For example:</p> <ul style="list-style-type: none"> • How well are the contexts of the data described? • Has the diversity of perspective and content been explored? • How well has the detail and depth been demonstrated? • Are responses compared and contrasted across groups/sites? 	<p>Rich</p> <p>Poor</p> <p>Not sure/not reported</p>	<p>Comments:</p>

<p>10. Is the analysis reliable?</p> <p>For example:</p> <ul style="list-style-type: none"> • Did more than 1 researcher theme and code transcripts/data? • If so, how were differences resolved? • Did participants feed back on the transcripts/data if possible and relevant? • Were negative/discrepant results addressed or ignored? 	<p>Reliable</p> <p>Unreliable</p> <p>Not sure/not reported</p>	<p>Comments:</p>
<p>11. Are the findings convincing?</p> <p>For example:</p> <ul style="list-style-type: none"> • Are the findings clearly presented? • Are the findings internally coherent? • Are extracts from the original data included? • Are the data appropriately referenced? • Is the reporting clear and coherent? 	<p>Convincing</p> <p>Not convincing</p> <p>Not sure</p>	<p>Comments:</p>
<p>12. Are the findings relevant to the aims of the study?</p>	<p>Relevant</p> <p>Irrelevant</p> <p>Partially relevant</p>	<p>Comments:</p>
<p>13. Conclusions</p> <p>For example:</p>	<p>Adequate</p> <p>Inadequate</p> <p>Not sure</p>	<p>Comments:</p>

<ul style="list-style-type: none"> • How clear are the links between data, interpretation and conclusions? • Are the conclusions plausible and coherent? • Have alternative explanations been explored and discounted? • Does this enhance understanding of the research topic? • Are the implications of the research clearly defined? <p>Is there adequate discussion of any limitations encountered?</p>		
<p>Ethics</p>		
<p>14. How clear and coherent is the reporting of ethics?</p> <p>For example:</p> <ul style="list-style-type: none"> • Have ethical issues been taken into consideration? • Are they adequately discussed e.g. do they address consent and anonymity? • Have the consequences of the research been considered i.e. raising expectations, changing behaviour? • Was the study approved by an ethics committee? 	<p>Appropriate</p> <p>Inappropriate</p> <p>Not sure/not reported</p>	<p>Comments:</p>

Overall assessment		
<p>As far as can be ascertained from the paper, how well was the study conducted? (see guidance notes)</p>	<p>++ + -</p>	<p>Comments:</p>

**Appendix F - Adapted National Institute for Health and Care Excellence
Checklist for Quantitative Studies**

Study identification:		
Guidance topic:		Key research question/aim:
Checklist completed by:		
Theoretical approach		
<p>1. Is a quantitative approach appropriate?</p> <ul style="list-style-type: none"> • Could a qualitative approach better have addressed the research question? 	<p>Appropriate</p> <p>Inappropriate</p> <p>Not sure</p>	<p>Comments:</p>
<p>2. Is the study clear in what it seeks to do?</p> <p>For example:</p> <ul style="list-style-type: none"> • Is the purpose of the study discussed – aims/objectives/research question/s? • Is there adequate/appropriate reference to the literature? • Are underpinning values/assumptions/theory discussed? 	<p>Clear</p> <p>Unclear</p> <p>Mixed</p>	<p>Comments:</p>
Study design		

<p>3. How defensible/rigorous is the research design/methodology?</p> <p>For example:</p> <ul style="list-style-type: none"> • Is the design appropriate to the research question? • Is a rationale given for using a quantitative approach? • Are there clear accounts of the rationale/justification for the sampling, data collection and data analysis techniques used? • Is the selection of cases/sampling strategy theoretically justified? 	<p>Defensible</p> <p>Indefensible</p> <p>Not sure</p>	<p>Comments:</p>
<p>Data collection</p>		
<p>4. How well was the data collection carried out?</p> <p>For example:</p> <ul style="list-style-type: none"> • Are the data collection methods clearly described? • Were the appropriate data collected to address the research question? • Was the data collection and record keeping systematic? 	<p>Appropriately</p> <p>Inappropriately</p> <p>Not sure/inadequately reported</p>	<p>Comments:</p>
<p>Population</p>		

<p>5. Is the source population or source area well described?</p> <p>Was the country (e.g. developed or non-developed, type of healthcare system), setting (primary schools, community centres etc.), location (urban, rural), population demographics etc. adequately described?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>
<p>6. Is the eligible population or area representative of the source population or area?</p> <p>Was the recruitment of individuals, clusters or areas well defined (e.g. advertisement, birth register)?</p> <p>Was the eligible population representative of the source? Were important groups under-represented?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>
<p>7. Do the selected participants or areas represent the eligible population or area?</p> <p>Was the method of selection of participants from the eligible population well described?</p> <p>What % of selected individuals or clusters agreed to participate? Were there any sources of bias?</p> <p>Were the inclusion or exclusion criteria explicit and appropriate?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>

Section 3: Outcomes		
<p>8. Were outcome measures reliable?</p> <p>Were outcome measures subjective or objective (e.g. biochemically validated nicotine levels ++ vs self-reported smoking -)?</p> <p>How reliable were outcome measures (e.g. inter- or intra-rater reliability scores)?</p> <p>Was there any indication that measures had been validated (e.g. validated against a gold standard measure or assessed for content validity)?</p>	<p>++</p> <p>+</p> <p>-</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>
<p>9. Were all outcome measurements complete?</p> <p>Were all or most study participants who met the defined study outcome definitions likely to have been identified?</p>	<p>++</p> <p>+</p> <p>-</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>
<p>10. Were all important outcomes assessed?</p> <p>Were all important benefits and harms assessed?</p> <p>Was it possible to determine the overall balance of benefits and harms of the intervention versus comparison?</p>	<p>++</p> <p>+</p> <p>-</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>

<p>11. Are the findings relevant to the aims of the study?</p>	<p>Relevant Irrelevant Partially relevant</p>	<p>Comments:</p>
<p>12. Were the estimates of effect size given or calculable?</p> <p>Were effect estimates (e.g. relative risks, absolute risks) given or possible to calculate?</p>	<p>++ + - NR NA</p>	<p>Comments:</p>
<p>13. Were the analytical methods appropriate?</p> <p>Were important differences in follow-up time and likely confounders adjusted for?</p> <p>If a cluster design, were analyses of sample size (and power), and effect size performed on clusters (and not individuals)?</p> <p>Were subgroup analyses pre-specified?</p>	<p>++ + - NR NA</p>	<p>Comments:</p>
<p>Section 5: Summary</p>		
<p>14. Are the study results internally valid (i.e. unbiased)?</p> <p>How well did the study minimise sources of bias (i.e. adjusting for potential confounders)?</p>	<p>++ + -</p>	<p>Comments:</p>

<p>Were there significant flaws in the study design?</p>		
<p>15. Are the findings generalisable to the source population (i.e. externally valid)?</p> <p>Are there sufficient details given about the study to determine if the findings are generalisable to the source population? Consider: participants, interventions and comparisons, outcomes, resource and policy implications.</p>	<p>++ + –</p>	<p>Comments:</p>
<p>16. How clear and coherent is the reporting of ethics?</p> <p>For example:</p> <ul style="list-style-type: none"> • Have ethical issues been taken into consideration? • Are they adequately discussed e.g. do they address consent and anonymity? • Have the consequences of the research been considered i.e. raising expectations, changing behaviour? • Was the study approved by an ethics committee? 	<p>Appropriate Inappropriate Not sure/not reported</p>	<p>Comments:</p>

Overall assessment		
As far as can be ascertained from the paper, how well was the study conducted? (see guidance notes)	++ + -	Comments:

**Appendix G - Adapted National Institute for Health and Care Excellence
Checklist for Mixed Methods Studies**

Study identification:		
Guidance topic:	Key research question/aim:	
Checklist completed by:		
Theoretical approach		
1. Is a mixed approach appropriate?	Appropriate Inappropriate Not sure	Comments:
2. Is the study clear in what it seeks to do? For example: <ul style="list-style-type: none"> • Is the purpose of the study discussed – aims/objectives/research question/s? • Is there adequate/appropriate reference to the literature? • Are underpinning values/assumptions/theory discussed? 	Clear Unclear Mixed	Comments:
Study design		
3. How defensible/rigorous is the research design/methodology?	Defensible Indefensible	Comments:

<p>For example:</p> <ul style="list-style-type: none"> • Is the design appropriate to the research question? • Is a rationale given for using a mixed approach? • Are there clear accounts of the rationale/justification for the sampling, data collection and data analysis techniques used? • Is the selection of cases/sampling strategy theoretically justified? 	<p>Not sure</p>	
<p>Data collection</p>		
<p>4. How well was the data collection carried out?</p> <p>For example:</p> <ul style="list-style-type: none"> • Are the data collection methods clearly described? • Were the appropriate data collected to address the research question? • Was the data collection and record keeping systematic? 	<p>Appropriately</p> <p>Inappropriately</p> <p>Not sure/inadequately reported</p>	<p>Comments:</p>
<p>Population</p>		
<p>5. Is the source population or source area well described?</p> <p>Was the country (e.g. developed or non-developed, type of healthcare system), setting (primary schools, community centres etc.),</p>	<p>++</p> <p>+</p> <p>–</p>	<p>Comments:</p>

location (urban, rural), population demographics etc. adequately described?	NR NA	
<p>6. Is the eligible population or area representative of the source population or area?</p> <p>Was the recruitment of individuals, clusters or areas well defined (e.g. advertisement, birth register)?</p> <p>Was the eligible population representative of the source? Were important groups under-represented?</p>	++ + - NR NA	Comments:
<p>7. Do the selected participants or areas represent the eligible population or area?</p> <p>Was the method of selection of participants from the eligible population well described?</p> <p>What % of selected individuals or clusters agreed to participate? Were there any sources of bias?</p> <p>Were the inclusion or exclusion criteria explicit and appropriate?</p>	++ + - NR NA	Comments:
<p>8. Is the role of the researcher clearly described?</p> <p>For example:</p> <ul style="list-style-type: none"> • Has the relationship between the researcher and the participants been adequately considered? 	Clearly described Unclear Not described	Comments:

<ul style="list-style-type: none"> Does the paper describe how the research was explained and presented to the participants? 		
<p>9. Is the context clearly described?</p> <p>For example:</p> <ul style="list-style-type: none"> Are the characteristics of the participants and settings clearly defined? Were observations made in a sufficient variety of circumstances Was context bias considered 	<p>Clear</p> <p>Unclear</p> <p>Not sure</p>	<p>Comments:</p>
<p>10. Were the methods reliable?</p> <p>For example:</p> <ul style="list-style-type: none"> Was data collected by more than 1 method? Is there justification for triangulation, or for not triangulating? Do the methods investigate what they claim to? 	<p>Reliable</p> <p>Unreliable</p> <p>Not sure</p>	<p>Comments:</p>
<p>Outcomes</p>		
<p>11. Were outcome measures reliable?</p> <p>Were outcome measures subjective or objective (e.g. biochemically validated nicotine levels ++ vs self-reported smoking -)?</p> <p>How reliable were outcome measures (e.g. inter- or intra-rater reliability scores)?</p>	<p>++</p> <p>+</p> <p>-</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>

Was there any indication that measures had been validated (e.g. validated against a gold standard measure or assessed for content validity)?		
<p>12. Were all outcome measurements complete?</p> <p>Were all or most study participants who met the defined study outcome definitions likely to have been identified?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	Comments:
<p>13. Were all important outcomes assessed?</p> <p>Were all important benefits and harms assessed?</p> <p>Was it possible to determine the overall balance of benefits and harms of the intervention versus comparison?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	Comments:
<p>14. Are the findings relevant to the aims of the study?</p>	<p>Relevant</p> <p>Irrelevant</p> <p>Partially relevant</p>	Comments:
<p>15. Were the estimates of effect size given or calculable?</p> <p>Were effect estimates (e.g. relative risks, absolute risks) given or possible to calculate?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	Comments:

<p>16. Is the data analysis sufficiently rigorous?</p> <p>For example:</p> <ul style="list-style-type: none"> • Is the procedure explicit – i.e. is it clear how the data was analysed to arrive at the results? • How systematic is the analysis, is the procedure reliable/dependable? • Is it clear how the themes and concepts were derived from the data? 	<p>Rigorous</p> <p>Not rigorous</p> <p>Not sure/not reported</p>	<p>Comments:</p>
<p>17. Is the data 'rich'?</p> <p>For example:</p> <ul style="list-style-type: none"> • How well are the contexts of the data described? • Has the diversity of perspective and content been explored? • How well has the detail and depth been demonstrated? • Are responses compared and contrasted across groups/sites? 	<p>Rich</p> <p>Poor</p> <p>Not sure/not reported</p>	<p>Comments:</p>
<p>18. Is the analysis reliable?</p> <p>For example:</p> <ul style="list-style-type: none"> • Did more than 1 researcher theme and code transcripts/data? • If so, how were differences resolved? 	<p>Reliable</p> <p>Unreliable</p> <p>Not sure/not reported</p>	<p>Comments:</p>

<ul style="list-style-type: none"> • Did participants feed back on the transcripts/data if possible and relevant? • Were negative/discrepant results addressed or ignored? 		
<p>19. Are the findings convincing?</p> <p>For example:</p> <ul style="list-style-type: none"> • Are the findings clearly presented? • Are the findings internally coherent? • Are extracts from the original data included? • Are the data appropriately referenced? • Is the reporting clear and coherent? 	<p>Convincing</p> <p>Not convincing</p> <p>Not sure</p>	<p>Comments:</p>
<p>20. Are the findings relevant to the aims of the study?</p>	<p>Relevant</p> <p>Irrelevant</p> <p>Partially relevant</p>	<p>Comments:</p>
<p>21. Conclusions</p> <p>For example:</p> <ul style="list-style-type: none"> • How clear are the links between data, interpretation and conclusions? • Are the conclusions plausible and coherent? • Have alternative explanations been explored and discounted? 	<p>Adequate</p> <p>Inadequate</p> <p>Not sure</p>	<p>Comments:</p>

<ul style="list-style-type: none"> • Does this enhance understanding of the research topic? • Are the implications of the research clearly defined? <p>Is there adequate discussion of any limitations encountered?</p>		
<p>22. Were the estimates of effect size given or calculable?</p> <p>Were effect estimates (e.g. relative risks, absolute risks) given or possible to calculate?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>
<p>23. Were the analytical methods appropriate?</p> <p>Were important differences in follow-up time and likely confounders adjusted for?</p> <p>If a cluster design, were analyses of sample size (and power), and effect size performed on clusters (and not individuals)?</p> <p>Were subgroup analyses pre-specified?</p>	<p>++</p> <p>+</p> <p>–</p> <p>NR</p> <p>NA</p>	<p>Comments:</p>
<p>Summary</p>		
<p>24. Are the study results internally valid (i.e. unbiased)?</p> <p>How well did the study minimise sources of bias (i.e. adjusting for potential confounders)?</p>	<p>++</p> <p>+</p> <p>–</p>	<p>Comments:</p>

<p>Were there significant flaws in the study design?</p>		
<p>25. Are the findings generalisable to the source population (i.e. externally valid)?</p> <p>Are there sufficient details given about the study to determine if the findings are generalisable to the source population? Consider: participants, interventions and comparisons, outcomes, resource and policy implications.</p>	<p>++ + –</p>	<p>Comments:</p>
<p>26. How clear and coherent is the reporting of ethics?</p> <p>For example:</p> <ul style="list-style-type: none"> • Have ethical issues been taken into consideration? • Are they adequately discussed e.g. do they address consent and anonymity? • Have the consequences of the research been considered i.e. raising expectations, changing behaviour? • Was the study approved by an ethics committee? 	<p>Appropriate Inappropriate Not sure/not reported</p>	<p>Comments:</p>

Overall assessment		
As far as can be ascertained from the paper, how well was the study conducted? (see guidance notes)	++ + -	Comments:

Appendix H – National Institute for Health and Care Excellence Quality Checklist Ratings

NS – Not Stated NR – Not Relevant NA – Not Applicable

Qualitative Studies

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Overall
Ahern et al 2015	✓	✓	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓	✓	+
Brunger, Serrato, Ogden, 2013	✓	✓	✓	✓	NS/NA	x	✓	✓	✓	✓	✓	✓	✓	✓	+
Demers, 2011	✓	✓	NS	✓	x	x	✓	NS/NR	✓	✓	✓	✓	✓	✓	+
Demers, 2013*	✓	✓	✓	✓	NS	NS	✓	✓	✓	✓	✓	✓	NS	✓	+
Herman and Yarwood 2014 (UK)	✓	✓	NS/NA	NS/NA	NS/NA	NS/NA	NS/NA	NS/NA	✓	NS/NA	✓	✓	x	NS/NA	-

Quantitative Studies

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Overall
Black (2010)	NS	✓	✓	✓	++	NS	+	-	+	+	✓	NA	-	NS	NS	NS/NR	-
Fuller & Redfering (1976)	✓	x	NS	NS/NR	-	NR	NR	NR	NR	-	✓	+	+	+	-	NS/NR	-
Larson & Norman (2014)	✓	✓	✓	✓	++	+	+	-	NR	?	✓	+	+	NS/NR	NS/NR	✓	+

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Overall
MacLean et al (2014)	✓	✓	✓	✓	++	+	+	?	?	+	✓	++	+	+	+	NS/NR	+
O'Neill & Fontaine (1973)	✓	✓	NS	✓	-	NR	NR	NR	NR	NR	✓	++	-	+	NS	NS	-
Sayer et al (2010)*	✓	✓	✓	✓	++	+	+	+	+	+	✓	+	+	+	+	✓	+
Spiegel & Shultz (2003)	✓	✓	✓	✓	+	NR	+	NR	NR	+	✓	+	+	+	+	NS/NR	+
Taylor et al (2007)*	✓	✓	NS	✓	+	NR	+	+	+	+	✓	+	?	+	?	NS/NR	+

Mixed Studies

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	Overall
Schonfeld et al 2015	✓	✓	NS	✓	+	NR	-	✓	✓	✓	+	+	+	✓	++	x	x	NS/NR	NS	✓	✓	++	+	-	-	✓	+
Strayer, Ellenhorn 1975	✓	✓	✓	✓	+	+	+	x	x	✓	+	NR	+	✓	-	x	NS/NR	✓	✓	✓	✓	-	+	-	-	NS/NR	+

Appendix I – British Journal of Psychology Author Guidelines



British Journal of Psychology

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Author Guidelines

The Editorial Board of the British Journal of Psychology is prepared to consider for publication:

- (a) reports of empirical studies likely to further our understanding of psychology
- (b) critical reviews of the literature
- (c) theoretical contributions Papers will be evaluated by the Editorial Board and referees in terms of scientific merit, readability, and interest to a general readership.

All papers published in The British Journal of Psychology are eligible for Panel A: Psychology, Psychiatry and Neuroscience in the Research Excellence Framework (REF).

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

Papers should normally be no more than 8000 words (excluding the abstract, reference list, tables and figures), although the Editor retains discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

3. Submission and reviewing

All manuscripts must be submitted via [Editorial Manager](#). The Journal operates a policy of anonymous (double blind) peer review. We also operate a triage process in which submissions that are out of scope or otherwise inappropriate will be rejected by the editors without external peer review to avoid unnecessary delays. Before submitting, please read the [terms and conditions of submission](#) and the [declaration of competing interests](#). You may also like to use the [Submission Checklist](#) to help you prepare your paper.

4. Manuscript requirements

- Contributions must be typed in double spacing with wide margins. All sheets must be numbered.
- Manuscripts should be preceded by a title page which includes a full list of authors and their affiliations, as well as the corresponding author's contact details. You may like to use [this](#) template. When entering the author names into Editorial Manager, the corresponding author will be asked to provide a CRediT contributor role to classify the role that each author played in creating the manuscript. Please see the [Project CRediT](#) website for a list of roles.
- The main document must be anonymous. Please do not mention the authors' names or affiliations (including in the Method section) and refer to any previous work in the third person.
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript but they must be mentioned in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate sheet. The resolution of digital images must be at least 300 dpi. All figures must be mentioned in the text.
- All articles should be preceded by an Abstract of between 100 and 200 words, giving a concise statement of the intention, results or conclusions of the article.
- For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full and provide DOI numbers where possible for journal articles.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright. For guidelines on editorial style, please consult the [APA Publication Manual](#) published by the American Psychological Association. If you need more information about submitting your manuscript for publication, please email [Melanie Seddon, Managing Editor \(bjop@wiley.com\)](mailto:Melanie.Seddon@wiley.com) or phone +44 (0) 1243 770 108.

5. Supporting Information

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Further information about the process of peer review and production can be found in this document: [What happens to my paper?](#) Appeals are handled according to [the procedure recommended by COPE](#).

Appendix J – Ethical Approval Letter

REMOVED FOR HARD BINDING

Appendix K – Participant Information Sheet

Title of the study: What are ex-military personnel's experiences of coping with and adjusting to traumatic amputation?

We would like to invite you to take part in our research study which is looking at the experience of ex-military amputees. Before you decide if you want to participate we would like you to understand why this research is being done. We would also like you to understand what it will involve for you if you decide to participate. You can talk to the research team first if you would like to find out more information before deciding whether to take part. The researcher will answer any questions you may have.

What is the purpose of the study?

We know coping with and adjusting to the loss of a limb and the transition from life in the armed forces to life as a civilian can be difficult, however we know very little about how people adjust to both of these things. This study aims to understand more about the journey of those who have experienced traumatic amputation during service and have subsequently left the armed forces. It is hoped that the information gained will help to improve the support and medical treatment for amputees.

Why have I been invited?

This information has been given to personnel who are no longer serving in the armed forces. We are looking to speak to people who suffered traumatic limb loss whilst on a tour of duty.

Do I have to take part?

No, participation is completely voluntary. If you decide to take part you will be asked to sign a consent form to indicate that you agree to do so. You are free to withdraw from the study up to the point where the study results are analysed and written up (so we can still use the information you have provided to us and it is not wasted). You do not have to give a reason for your withdrawal.

What will happen if I decide to take part?

If you are interested in taking part please email Jessica Guilding at j.guilding@2014.hull.ac.uk or ring on 07561 806093 (Trainee Clinical Psychologist Doctoral student) with your name and preferred contact method. She will then contact you to answer any questions and discuss how best to conduct the interview and to agree a suitable time to talk to her. This discussion may take place face to face, over the telephone or over skype. You will have to answer some short questions about you, for example your gender and your age. We would not like you to disclose any information that might be bound by the Official Secrets Act (1989) or any individual information about your corps or regiment. The researcher who is a trainee clinical psychologist will ask you to talk about your experience of being an ex-military amputee and will audio record the discussion so she can analyse what you have said at a later date. We are interested in your experiences, beliefs and understanding of what happened so there are no right or wrong answers. It will be up to you how much or little

you wish to disclose about your experiences, so we will not ask you to discuss anything you feel will be too difficult or upsetting. The discussion will involve you telling your story and experiences since your amputation. It is likely to last around 60 but no more than 90 minutes.

What are the possible disadvantages and risks of taking part?

Participating in the study will require your time and this may be inconvenient for you. Some people may find it difficult or upsetting to talk about their story. If this happens to you the researcher will offer guidance on how to gain access to further help from support organisations or your GP. It might also be helpful to consider whether you think you will be able to talk about your story before you agree to take part.

What are the possible benefits of taking part?

We cannot promise that you will have any direct benefits from taking part in the study. However, it is hoped that the information you give us will help us to understand more about the experiences of ex-military amputees. It may also help to improve relevant treatment plans and support from services. Some people have also found it helpful to think and talk about their story.

What will happen if I decide I no longer wish to take part?

You are free to withdraw from the study before the results are analysed and the study is written-up without giving a reason.

What if there is a problem?

If you have a concern about the study you can contact the researcher or their supervisor who will do their best to answer your questions.

Will my taking part in this study be kept confidential?

Yes, all the personal information that you provide will be kept strictly confidential. Any information that could be used to identify you will not be used in the research. The people who will decide to participate will be given a code to protect their anonymity. After the research is completed all the audio recordings will be destroyed. The only time that information cannot be kept confidential is if you disclose something that suggests that you or someone else is at risk of harm. If this happens during the interview the researcher may need to contact appropriate authorities to ensure you or others are safe. The researcher may also suggest contacting SSAFA or encourage you to contact one of the organisations on the attached sources of support sheet. It is unlikely that this will happen and the researcher will try to discuss this with you first.

What will happen to the results of the study?

After the study is completed if you wish you will be given written feedback about the results of the study. We will also invite you to make comments on the results if you wish but this will be completely voluntary. Then the results will be written-up and submitted for publication in an academic journal. Some direct quotes from your interview may be used in the write-up but they will not identify you, your corps or

regiment. Your personal details and any identifiable data **will not** be included in the write-up.

Who is organising and funding the research?

This research is being undertaken as part of a doctoral research project in Clinical Psychology. The research is funded by the University of Hull. Some sections of data collected during the study which are relevant to taking part in this research may be looked at by the research team from the University of Hull.

Who has reviewed the study?

The study is reviewed by an independent organisation which is called a Research Ethics Committee. The Research Ethics Committee protects the interest of people who participate in research. This study has been reviewed by the Faculty of Health and Social Care Research Ethic Committee at the University of Hull and been given a favourable opinion.

If you have any further questions, comments or queries, please don't hesitate to contact Jessica Guilding. Thank you for taking the time to read this information.

Further information and contact details

Jessica Guilding
Trainee Clinical Psychologist
j.guilding@2014.hull.ac.uk
07561 806093

Dr Tim Alexander
Research co-ordinator
t.alexander@hull.ac.uk

01482 464030

Dr Janet Kelly
Ex regular QARANC, now reservist
j.kelly@hull.ac.uk
01482 464530

Dr Claire Wilson
Clinical Psychologist
clairewilson16@nhs.net
01482 617771

Thank you for taking the time to read this.

Appendix L – Participant Consent Form

Title of Project: What are ex-military personnel’s experiences of coping with and adjusting to traumatic amputation?

Name of Researcher: Jessica Guilding (Trainee Clinical Psychologist)
Supervised by Dr Tim Alexander (Research Coordinator)
Dr Janet Kelly (Ex regular QARANC, now reservist)
Dr Claire Wilson (Clinical Psychologist)

Please initial boxes

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information and fully understand what is being proposed. If I had any questions, they have been answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason up to the point of data analysis and transcription.

3. I confirm that direct quotes from the interview may be used in future publications and understand that they will be anonymised.

4. I agree to take part in the interview part of the study and understand that my interview will be audio recorded.

Name of participant

Date

Signature

Name of person taking consent

Date

Signature

When completed: 1 for participant; 1 for researcher site file.

Appendix M – Sources of Support Sheet

Should you wish to receive further support following your interview please contact one of the organisations listed below.

Help for heroes

- Telephone: 01980 844 280 Monday-Friday 9am-5pm
- Email: bandofbrothers@helpforheroes.org.uk /
bandofsisters@helpforheroes.org.uk
- Website <http://www.helpforheroes.org.uk/>

Royal British Legion

- Telephone: 0808 802 8080 8.00-20.00 all week
- Website: <http://www.britishlegion.org.uk/>

SSAFA

- Telephone: 0800 731 4880 9.00-17.30 weekdays
- Website: <https://www.ssafa.org.uk>

Blesma

- Telephone: 020 8590 1124
- Website: <https://blesma.org/>

Combat Stress

- Telephone: 0800 138 1619- 24 hours
- Email: contactus@combatstress.org.uk
- Website: <http://www.combatstress.org.uk/>

Veterans Welfare Service

- **UK Helpline: 0808 1914218**

You can also seek advice from your GP

Appendix N – Participants’ Demographic Questionnaire

Age:

Gender:

Military Role:

Time since amputation:

Appendix O – Interview Instructions

I’d like to ask you about your experience of adapting to amputation and life after leaving the armed forces. I’d like you to think of the experience as a story, comprising of a beginning middle and end, with important characters and events. I am particularly interested in your understanding of how being an amputee is for you and also your experiences of how society views amputees and the reactions of those around you. I am also interested in whether you have noticed any differences in how you or others perceive yourself, and whether the transition from the armed forces to life as an ex-military amputee has impacted on how you view yourself.

Appendix P – Supporting Quotes for Story Phases

<p>Phase 1: Childhood</p>	<p><i>“I’m totally uneducated I joined the army urm whilst I should have been doing my exams” Joey</i></p> <p><i>“I joined the army well I started my a levels but I didn’t finish... I was I was really young that time” George</i></p> <p><i>“I then with the help from my step father at the time we took his head off rebuilt it re-lapped al the valves put it all back together and I love all that sort of stuff ... getting my hands dirty” Callum</i></p> <p><i>“my step-father was a bit of a urr a bit of a tom he was a real violent parent” Callum</i></p> <p><i>“I always felt like I was in the wrong” Callum</i></p> <p><i>“it wasn’t the confidence to go and join the army, it was a case of I’ve gotta get out of this” Callum</i></p>
<p>Phase 2: Army</p>	<p><i>“we were just wrapped up in our own world inside really” Joey</i></p> <p><i>“I thoroughly enjoyed it” Joey</i></p> <p><i>“cause the job we were doing was really urr was really urr really really dangerous ... and and for us to be able to work as a team you must trust that that the other person next urr from you” George</i></p> <p><i>Joined to “get that family unit that we didn’t have” Callum</i></p> <p><i>“you wouldn’t leave anybody behind” “you’re always looking out for him and he is looking out for you” Callum</i></p>
<p>Phase 3: Injury/Amputation</p>	<p><i>“we decided to go down and feed the dogs urr a little bit earlier than we normally do so that urr so that we are ready to go ready to go out to work” Joey</i></p> <p><i>“I was the seventh guy and no one expect it” George</i></p> <p><i>“it was really really you know good experience for me cause it was one of the the first experience that we’ve that I’ve experienced there of [country] and everyone was really happy and greeting us and things like that” George</i></p> <p><i>“My weapons had been blown out the vehicle, apart from the weapon that was attached to my urr to my body. Urm and I used that to defend myself, when they urr small arms fire and the insurgents I guess you would call them, urm came to get me out the vehicle, I think it was a kidnapping attempt.” Zak</i></p> <p><i>“the reason I got injured in the first place was cause I got we got moved up ahead of front lines” Callum</i></p>

<p>Phase 3: Injury/Amputation (continued)</p>	<p><i>“it was a bit of a bit of a balls up I suppose that with the army they sent in a helicopter in broad daylight to to give us a resupply cause we had been there a couple of days... and basically the [people] were sat there monitoring it and they started chucking everything at it” Callum</i></p> <p><i>“it was just half way through the tour we had dealt with a number of incidents already so I felt very confident that the company urm that I was with you know would would be able to handle the incident pretty well” Olivia</i></p>
<p>Phase 4: Numb</p>	<p><i>“your eyes pop out and you see stars for a second it was kind of like that” Joey</i></p> <p><i>“ for a few seconds I wondered what the hell was going on” Joey</i></p> <p><i>“pain in sense, or the feeling of pain had stopped working at that point” Joey</i></p> <p><i>“looking down I felt no pain whatsoever” Zak</i></p> <p><i>“I actually thought my arm was the worst because I could see [my leg] that I couldn’t see because I still had my urr clothes on” Zak</i></p> <p><i>“I was unsure that it was us that had been hit” Olivia</i></p> <p><i>“I didn’t have any idea of the severity of the injury” Olivia</i></p>
<p>Phase 5: Is this it?</p>	<p><i>“I kind of looked up at the sky, it was a typical [city] grey sky ... and urm I looked up and I thought me nans gonna come and get me though she she’ll shouting at me down the tunnel like Joey come to the light come to the light *laughs*... anyway ... I kind of realised that wasn’t going to happen ... urmmm ur so I reached for my pistol” Joey</i></p> <p><i>“urr thought I’m about to die” Joey</i></p> <p><i>“I reached for it[weapon] with every intention of shooting myself, I thought well I’ll top this off, I’ll do it quick” Joey</i></p> <p><i>“I was just gonna end it there and then” Callum</i></p> <p><i>“it’s like that cloud over your head ... you feel rock bottom” Callum</i></p>
<p>Phase 6: Receiving Help</p>	<p><i>“I had lots of parts of my body missing and *laughs* ... and it all hurt a lot ... so I screamed, I screamed a lot” Joey</i></p> <p><i>“within seconds [of having entinox] I was as high as a kite *laughs*... and I thought this was the funniest thing in the world” Joey</i></p> <p><i>“I leant over and grabbed the tail of one of the guys jackets, one of the ambulance guys jackets ... and urr he turned round and I said to him cheers mate thanks a lot because im still off</i></p>

<p>Phase 6: Receiving Help (continued)</p>	<p><i>me tits on entinox ... and he turned round and he said in this broad [city] accent 'never you mind big fella you get better' and that was it it's the last thing, I was urr woke up 4 days later " Joey</i></p> <p><i>"it wasn't actually until I was at the urm medical centre in in one of the bases urm that that's when I starting having panic" Zak</i></p> <p><i>"I was in and out of ICU high dependency back to backwards and forwards and it was all going round in circles" Zak</i></p> <p><i>"they took my leg off at 10:30 at 11:30 I was awake" Zak</i></p> <p><i>"I'm in I'm just sitting there and everyone was just calming me down and and sort of like I was yeah even though I was screaming and and stuff like that ... but urm you know I wanted to see my legs I was saying I wanna sit down to see my legs they and they say no no no don't worry you'll be fine that stuff but inside meself I I knew that I'd lost me legs" George</i></p> <p><i>"the chopper came in and urm when I was in there they started asking me questions I'm pretty sure you are in the medical field you must know that ... o what's your name to see that where I am cause he doesn't know in the chopper o what's your name what's your admin number and stuff like that ... okay you know giving me things that as something lying there you know what I mean just the the normal stuff and urm I think that that's the time they knocked me out" George</i></p> <p><i>"you feel that the army's embarrassed about ... you know things that have happened and they don't or they didn't deal with it very well" Callum</i></p> <p><i>"as far as the army was concerned [name] well now you're an amputee we don't want you anymore" Callum</i></p> <p><i>"it is a bit of a kick in the teeth" Callum</i></p> <p><i>"I was injured here I had to get one and a half kilometres to get picked up so I crawled it" Callum</i></p> <p><i>"couple of days in hospital in [camp] and then back to [place]" Olivia</i></p> <p><i>"the incident happened on the Saturday and urm I was in [place] by the Monday afternoon evening" Olivia</i></p>
<p>Phase 7: Choice</p>	<p><i>"I kind of had a word with myself you know 'get used to it joey this is your this is your life'" Joey</i></p> <p><i>"I'm spun round and I'm absolutely ... face to face with myself ... in this full length full length mirror and this is the first time I've seen myself ... urm in a mirror, urm sort of full length if</i></p>

<p>Phase 7: Choice (continued)</p>	<p><i>you like ... since I got blown up and it quite it quite literally stopped me in my tracks. I didn't get upset, I didn't start wailing and screaming and howling and ... particularly whingy about it urm I just stood there, sat there staring at myself ... and it was it was urr yeah it was it could have been 20 minutes just staring at myself" Joey</i></p> <p><i>"relying on morphine urm ketamine and things like that that urm the option was given for me to to have an amputation" Zak</i></p> <p><i>"I just accepted it" Zak</i></p> <p><i>"but I think one of the biggest urm things that really helped me urr in my recovery as well as a a for me to be where I am right now is acceptance" George</i></p> <p><i>"I said to myself listen this is me I've lost my legs I have to accept it and accept what happened and just move on ... and and just you know life goes on so that really help" George</i></p> <p><i>"I just asked him whether I would be able to run, play tennis and ski" Olivia</i></p> <p><i>"it was a really straight forward decision for me" Olivia</i></p>
<p>Phase 8: Perspective</p>	<p><i>"it was all single rooms with some very very very badly injured people" Joey</i></p> <p><i>"he didn't survive, he died ... of burns, the night I was awake so urm so there was really badly damaged people in that place" Joey</i></p> <p><i>"some are luckier than others ... a below knee really is just urr in the grand scheme of things just a scratch, urm above knee double above knee you know arm amputees I think they've got more of a more of a harder situation" Zak</i></p> <p><i>"I just went why have you got a model of urr again the ignorance because I thought I was the only amputee initially when I was angry with it ... urm and then I said what you know why have you is that a demonstration model or a sales model or something it's just a miniature of a grown up one ... she said no that's for children so my urr why would you have children here and then it's that acceptance that urr ... and now when you say it puts everything into perspective" Zak</i></p> <p><i>"they got thousands of guys out there that lost their limbs without even going to a warzone" George</i></p> <p><i>"cause we've seen a lot of people I'm pretty sure working in the NHS you've seen young young kids or or young children losing their legs just having canceryou know I could have been one of them" George</i></p>

<p>Phase 8: Perspective</p>	<p><i>“I’ve watched the TV a lot of these guy that have come back that are triple amputees and they you think th I know how bad it was for me ... and you see them and you think o this was I did like a flesh wound” Callum</i></p> <p><i>“well there are other people who are worse off” Callum</i></p> <p><i>“it’s really hard to sort wallow and feel sorry for yourself because you are surrounded by people who are you know in much worse situations than you you know guys who have lost 2 or 3 limbs for example you know ... or guys who have had brain injuries or you know urm strokes at a really young age” Olivia</i></p> <p><i>“I’ve always felt very lucky you know that things could have been worse” Olivia</i></p>
<p>Phase 9: Moving Forward</p> <p>Phase 9: Moving Forward</p>	<p><i>“Doing getting better, having operations, rehabilitation and finally discharging from the military” Joey</i></p> <p><i>“trying to get off a lot of the drugs as well the drugs were fucking doing my nut in” Joey</i></p> <p><i>“then I came back to zero and started the progress” Zak</i></p> <p><i>“the recovery was extremely ext extremely painful ... motivation was an issue” Zak</i></p> <p><i>“A lot of education about how to stand because we are not aware of how we are born and we know how to stand and we walk you know but we all walk and sit and stand you know incorrectly” Zak</i></p> <p><i>“I I’ve had my ups and downs but the structure of it was the the physical rehabilitation mental rehabilitation as well as you know seeing other guys there and and emotionally ... sorting out yourself as well so you know when I was there I was there the the the first couple of weeks I started getting used to things how things are done and then they started casting me with my sockets and and sorting out my prosthetic legs” George</i></p> <p><i>“wasn’t easy at that time but you know I I I’ve al I’ve always had positive attitude” George</i></p> <p><i>“I then went off and got my own rehabilitation” Callum</i></p> <p><i>“they pointed me to towards a electronics effectively” Callum</i></p> <p><i>“being in that environment where there are also other people who are similar to you and seeing their experiences I think makes a huge huge difference” Olivia</i></p> <p><i>“they were encouraging” Olivia</i></p>

	<p><i>“focus of physical rehab where you know it is just the just the function really that you’re that you’re that I was bothered about” Olivia</i></p>
<p>Phase 10: New Life</p>	<p><i>“I used to get undressed in in the dark it’s almost like being a school boy again because I didn’t wanna see it ... because of the the urm what I perceived other people would would think” Zak</i></p> <p><i>“I didn’t like going to the limb centre and getting my leg out” Zak</i></p> <p><i>“I didn’t feel like I had any meaning urm anything to give back to society anymore because I couldn’t run anymore I couldn’t do all the physical things I used to do. I struggled every day” Callum</i></p> <p><i>“I can’t do the things I should be doing” Callum</i></p> <p><i>“do something because if you sit you dwell and if you dwell that you are on a rocky road” Joey</i></p> <p><i>“getting a placement urm it’s it’s really really urr really tough” George</i></p> <p><i>“a lot of assessment centres a lot of urr online applications I mean I did a a to be honest I did more than 50 odd applications” George</i></p> <p><i>“it’s not something you can go to the job centre with” Zak</i></p> <p><i>“the guys I worked with they were more interested and they were intrigued and things like that” Callum</i></p> <p><i>“the only reason I got anywhere was because it was a job that was hands on” Callum</i></p> <p><i>“was then able to continue serving so I actually went back to work which urm again is quite unusual” Olivia</i></p> <p><i>“I wanted to promote which I did and am very proud” Olivia</i></p> <p><i>“as an amputee I I have no urm no life changing things urm I ride my motorbikes again now, urr I’ve urr done a parachute jump I’ve abseiled I’ve done quite a lot of arduous stuff” Zak</i></p> <p><i>“I ride western” “they are developing a way that its easier to sit on a saddle as an amputee so ... for ... everything you take in you are giving something back out ... because the next person it becomes easier and easier” Zak</i></p> <p><i>“there was a time I I I sat down in my room and I was I was thinking about myself saying that ask a a ask this question to</i></p>

<p>Phase 10: New Life (continued)</p>	<p><i>myself saying that urm is there anything I was doing ... when I had my legs before and now ... and believe it or not actually I I haven't got nothing" George</i></p> <p><i>"I'm doing ... pretty much all the things that I was doing before ... and I'm still doing them now ... so in in that sense I think nothing has changed ... apart from the obvious you know losing my legs" George</i></p> <p><i>"it wasn't easy before but I've I've adjusted a lot" "its more or less like I'm in in the middle of balancing out" "sometimes I use my military urr experience to solve certain things urr in the civilian world or or the other way around" George</i></p> <p><i>"we manage our PTSD in much the same way as someone with diabetes ... manages diabetes. You don't suffer, you don't have to suffer with diabetes ... you just have diabetes you manage your condition ... and I look at PTSD in urr in the same way ... you manage your condition by managing what you do, how you urr eat sleep and and do whatever in the day but also you know what you how you what situations you put yourself in ... where you get to, and how you might extract yourself from the urr, from certain situations as well" Joey</i></p> <p><i>"I even learnt to barefoot water ski I I'm on one leg so I'm skiing on one leg and I'm barefoot water skiing on one leg and that helped to give me the confidence to carry on" Callum</i></p> <p><i>"when you feel up tight about anything go and work out in the gym for an hour ... you come back battered but you feel ... feel a bit happier" Callum</i></p> <p><i>"when I had my my kids ... I thought well I can't go and play football with my children I can't go and run around back garden or do this and so again ... that little bit pulls you back down again" Callum</i></p> <p><i>"for me life's been a bit harder ... because I started in one position and I'm now ... mid-thigh ... so I've had a lot of operations" Callum</i></p> <p><i>"I wasn't a achieving the level of physical function that that I wanted ... that had made the decision to amputate so easy so urm I went back in for further revision surgery to try and make my leg more comfortable so that I could do more on it" Olivia</i></p> <p><i>"I'd done a lot of networking and of course all my all my client facing work my actual kind of income earning work if you like is is working with people" Olivia</i></p> <p><i>"I go to the gym regularly I've got 2 dogs now so I'm out walking them" Olivia</i></p>
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<p>Phase 10: New Life (continued)</p>	<p><i>“I’ve done some amazing things urm I’ve been really privileged to have some incredible experiences” Olivia</i></p> <p><i>“I’ve now got PTSD ... which is yet another nail in the coffin” Zak</i></p>
<p>Phase 11: Reflections</p>	<p><i>“one of the benefits to to being injured I think or or having my legs blown off was that I was kind of forced to confront that early early on ... and know that I am a fucking civilian I am not a soldier anymore I cannot be a soldier” Joey</i></p> <p><i>“I was quite fortunate in that ... it’s the guys that aren’t injured sometimes they are the ones that struggle to a appreciate and and and and urm a assimilate into civilian life” Joey</i></p> <p><i>“it’s probably changed me but it’s not changed me for the worse” Zak</i></p> <p><i>“if I was able-bodied I’d still be working ... I’d still be too busy to have quality of life I think that’s what I’ve, I’ve got quality of life in a different way” Zak</i></p> <p><i>“even though it was tough that time ... I think that makes me a better person now and and it was a good experience for me” George</i></p> <p><i>“if I hadn’t lost my legs or or I wouldn’t have done all those things ... or or have all those opportunities” George</i></p> <p><i>“now even though things are hard I’ve got things to look forward to” Callum</i></p> <p><i>“there is always an answer ... but you don’t see it yourself” Callum</i></p> <p><i>“I’d probably never go as far to say you know I’m really glad it happened *laughs* ... I certainly I can’t regret it either” Olivia</i></p> <p><i>“even now sometimes I can feel a bit self-conscious” Callum</i></p> <p><i>“you have your bad days but there are they are far outnumbered by a by a lot more positives” Olivia</i></p>

Appendix Q – Example Holistic-Form and Holistic-Content Analysis

Events, emotions, characters, actions,

Form	Transcript	Content
<p>Background to tour, blown up, just another normal day Description of day of amputation, prior to amputation</p> <p>Contrast of happy emotions and description of dangers, even though festival was going on for them it was another normal day</p> <p>Tour/army background</p>	<p>P: you know they say hi hi and urm that day was a big festival it was [festival] because [country] is a [religion] country it was the [festival] there so everyone goes</p> <p>I: mhmm</p> <p>P: they are in their you know their nice clothes they are going to the [religious centre] and stuff like that and everyone was happy and singing and and it was really really you know good experience for me cause it was one of the the first experience that we've that I've experienced there of [country] and everyone was really happy and greeting us and things like that</p> <p>I: mhmm</p> <p>P: so we went to the school urr urm had a chat with the with the [people] guys and they told us the [people] attacked them the night before and and urm you know they needed more ammunition and as well as maybe they would need some some of our guys to be there with them for for some while</p> <p>I: mm</p> <p>P: because the [people] might come back and and stuff like that and urm yeah and we were there what approximately an hour tops 2 hours then and our way going back to urr to the base urm we took the other route cause I I mean that was a a military tactic that we normally use that we don't normally take the same route all the time</p> <p>I: uhuh</p> <p>P: we normally change routes and stuff like that</p> <p>I: yep</p> <p>P: so our our way of going back to urr from sorry our our way of going to the school we took the main route</p> <p>I: mhmm</p> <p>P: our way of going back we took the back route more or less the other route cause</p> <p>I: mm</p>	<p>Everyone being friendly, ? lots of colours, noise, busy,</p> <p>Well dressed, feeling confident or good about themselves Whole atmosphere was happy, not just some people. Contrast to what you would expect in a war zone. He enjoyed it too, was learning about culture, felt welcomed</p> <p>Very pragmatic description of events, absence of emotion, suggestion of fear at school?</p> <p>Timing of the day important? Was the end of the day? Relying on their training,</p> <p>Everything was normal, sense of normality, pragmatic description, little emotion</p>

Description of amputation and injury	<p>P: urm cause that's that's what we always do</p> <p>I: yep</p> <p>P: urm with stuff like that and urm it was urr we started going back and it was like urm less than what 200m from from the base on top of a hill and urm you know I was the seventh guy and no one expect it you know we were a foot patrol and was a you know and urr above that hill I got I got I stood I stood on an IED that's that's a a a bomb improvised device and urm I stood on it and urrm it it instantly blew me off and urr took off both of my legs and I was thrown like over 200feet to the other side of the hill</p>	<p>Everything was normal</p> <p>?is he angry it was so close, seems very unlucky? Explaining to me as I'm a civilian – difference in our backgrounds becoming apparent? Scary that he was thrown so far, still very descriptive and lacking emotion</p>
His reaction, others reactions – start of emotions	<p>I: mhmm</p> <p>P: cause it was like on top of a hill cause I was just like</p> <p>I: mm</p>	
Description of amputation and injury	<p>P: and urm like everyone saying o contact contact and and and and you know everyone started flapping and and you know I was screaming and stuff</p> <p>I: mmm</p>	<p>Doing what they are trained</p> <p>Panic, fear, not knowing what to do?</p> <p>Overwhelming emotions,</p>
Changes focus to characters (named 'Receiving Help')	<p>P: urm then after that urm I was I was really conscious of what was what was going on and I I knew completely I I lost both of my legs you know straight</p> <p>I: mm</p>	<p>Different to others who weren't aware</p>
Back to description	<p>P: they guys came and the medics you know they did absolutely outstanding jobs actually and and both of them they are female the medics we have before Connie and Amy</p> <p>I: mhmm</p> <p>P: they they gave me morphine</p> <p>I: mm</p>	<p>Grateful, very appreciative, is that not their job? Does he expect them not to be good as they are female? Was it because I was female that he said it?</p>
Initial reaction – he knew he wanted to see his legs	<p>P: put tourniquets on both of my</p> <p>I: uhuh</p> <p>P: both my legs and and that time urm you know I I wanted to see my legs because I was I knew what was what was going on</p> <p>I: mm</p>	<p>Stops to describe characters and name them</p> <p>Was he in pain? Effect of morphine on his ability to think?</p> <p>Advanced medical care, makes it sound simple!</p>
Opposite to others (named 'Numb')	<p>P: but in the back of my mind I was just saying to myself that if the chopper comes in because I had my watch I looking at my watch and I said</p> <p>I: mm</p>	<p>What was it about seeing them? Need to know for sure? Interested, thinking about his physical appearance?</p>
Aware of threat to his life, more	<p>P: if the chopper comes in in 15 minutes then I'll make it if not *laughs* you</p>	<p>Very conscious and aware, alert, appears more calm</p> <p>Trying to avoid the reality of the threat,</p>

emotions/avoidance of emotions	know what I mean I'm well that's me you know	Another avoidance of reality or threat of death?
Getting help from others (named Receiving Help)	I: mm P: cause we we were not that far from urr [base] the main base I: okay P: so the chopper urr and and that time my boss he had he made some comms and urr what 10 15 minutes less than less than that the chopper came in	Felt he had a good chance of surviving? Helped him to avoid thinking about reality of threat
Other people's reaction was more calm – Receiving Help from others His reaction – very emotional	I: mhmm P: and urm by that time you know I'm in I'm just sitting there and everyone was just calming me down and and sort of like I was yeah even though I was screaming and and stuff like that I: mhmm P: but urm you know I wanted to see my legs I was sayin I wanna sit down to see my legs they and they say no no no don't worry you'll be fine that stuff but inside meself I I knew that I'd lost me legs	Safer to be helped by person above him? Doesn't describe or name him. Still descriptive Is it just if he is screaming etc? Who was everyone? He was 200ft away? Feels like it has been a long time? Difference between what he wanted and what they thought was best, Any emotion about it? Seems more calm?
Now he is controlling his helpers	I: mm P: you know straight away and I said nah don't worry and and they thought like if I if I see my legs like I'm I'm gonna flip out or I might start you know I mean *laughs*	Didn't want to add to his emotions
Own Reaction – wanted to see legs	I: mm P: doing stuff that or or you know but you know I totally am you know I they had my osprey but that that's normally called like a a a bullet proof or something like that I: yeah P: I told them o take that off cause I'm sweating and things like that	Giving me context and explanation?
Own Reaction? Hoping?	I: mm P: but the reason why I said that was cause I just wanted to see my legs cause if they have to take that off I have to sit down cause they can't take it off whilst I I'm lying down I: mhmm 9:15 P: so yeah and and and and then I sat down and they did take it off and and I saw my leg my legs but the the my right leg was completely urm completely off the the left one was still hanging there and and stuff like and yeah and urm I I started you know I mean praying into my	He instructs others He had a lot of physical and emotional responses, hot country He knew what was going on and what he wanted. Manipulative? Cheeky? Gets what he wants.
Own Reaction? Hoping?	I: mm 9:15 P: so yeah and and and and then I sat down and they did take it off and and I saw my leg my legs but the the my right leg was completely urm completely off the the left one was still hanging there and and stuff like and yeah and urm I I started you know I mean praying into my	Again very pragmatic not much emotion at first, starts by describing what had happened

<p>Back to description before incident</p>	<p>head that o o maybe jus random things kept coming into my head and I was saying cause there was this guy in the in the platoon I was really close with him</p>	<p>Wanting it back? Hoping he would be ok? Threat of death still Concern about others</p>
<p>Description of Army</p>	<p>I: mhmm P: even just 5 minutes before the incident I was I was having a chat with him like what we doing right now I: yeah P: and and everyone knew that I was really close to him I: mm P: and even we do a lot of stuff together like a lot of the even if you have to like for instance if they have to tell your partner you have to do this they say like o you do it with that person</p>	<p>How quickly it happened and the atmosphere changed, Sense of normality, helping me to understand again</p>
<p>Concern for others – part of own reaction, similar to initial reaction with screaming and more emotion</p>	<p>I: okay P: you know what I mean cause we are that close I: uhuh P: cause if you do stuff stuff for me it's I: mm P: it's really weird and and and and everyone knew that we enjoyed doing things together and I I was screaming saying that o is that person alright is that person alright and and what cause he was behind me</p>	<p>Doesn't describe him as a friend? Colleague? No name. Taking orders from above, close bond, work well together? Is he demonstrating closeness of army friends/colleagues</p>
<p>Cross between Initial Reaction and Receiving Help</p>	<p>I: mm P: and I you know he was alright because I was and everyone saying yeah don't worry about him so just think about yourself he's alright and stuff like that you know and I was saying alright that's fine and I started screaming and I I just I was just saying to myself I wanna see that person and stuff like that and they are saying no no don't worry he's alright he just take care of us and calm down everything is alright and before I know it the chopper came in and urm when I was in there they started asking me questions I'm pretty sure you are in the medical field you must know that</p>	<p>Still very panicky, emotional, overwhelmed More concerned about friend than himself?</p>
<p>Journey to camp and hospital</p>	<p>I: mm P: o what's your name to see that where I am cause he doesn't know in the chopper o what's your name what's your admin number and stuff like that</p>	<p>Didn't believe that he was ok? Wanted to see him to check? Wanted to see him to say bye? Other people helping him to cope with emotions</p>
<p>Journey to hospital (Receiving help)</p>	<p>I: mm P: o what's your name to see that where I am cause he doesn't know in the chopper o what's your name what's your admin number and stuff like that</p>	<p>Distracting him, seeing if he is aware of what is happening Pragmatic, details, being done to, others are now in control,</p>

<p>Receiving help – abrupt end, signals end of phase?</p>	<p>P: okay you know giving me things that as something lying there you know what I mean just the the normal stuff and urm I think that that's the time they knocked me out</p> <p>I: mhmm</p> <p>P: and urm from that I didn't I didn't I didn't know what was going on</p>	<p>Normal for medicine? Is it normal to be in a chopper with no legs?</p> <p>He wasn't made aware they were going to knock him out? abrupt end to the emotions and panic and concern for others</p>
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Appendix R - List of Organisations Contacted

ABF The Soldiers Charity

Advance Study DMRC

Army Families Federation

Blesma

BCU Veterans PPI

Caroline De Peyrecave

Combat Stress

Douglas Bader Foundation

Help for Heroes

Invictus Games

Limbless Association

Pilgrim Bandits

Royal British Legion

Soldiers, Sailors, Airmen and Families Association (SSAFA)

Talking to Minds

Trauma FX

Veterans Outreach Support

Walking with the Wounded

Three participants were contacted through connections with family and friends, 2 verbally agreed to take part but did not complete the consent forms and so were not interviewed. Some participants also contacted individuals they knew who might be willing to take part. Some ex-military amputees have websites and so were contacted

directly through those. The study was also advertised and shared on Facebook, some on individual profiles, others in specific groups for veterans

A further three participants expressed their interest but were not interviewed as they did not fit the inclusion criteria, or decided they were no longer willing to be interviewed.

Appendix S – Epistemological Statement

Throughout this process, I was encouraged to be aware of my epistemology and choose the stance from which I viewed and developed my research. I did however always wonder whether Epistemology is really a choice, as I was already being influenced by the teaching we receive and my supervisors. Equally, I had already chosen to pursue a career in Clinical Psychology which has a number of values which are likely to be inextricably linked to my epistemology. I therefore knew from the start that I was interested in people's experiences and how they made sense of a certain phenomenon.

Qualitative research is often interested in an individual's experience, as it contains different data to quantitative research. There were therefore a number of methods, such as Interpretative Phenomenological Analysis (IPA), which I could have used. I was however encouraged by my supervisors to explore different methodologies and consider what fitted for me. The British Psychological Society's Division of Clinical Psychology mission states they work "*collaboratively with people who use our services and wider communities to improve wellbeing*" (n.d). I therefore wanted to find a method which for me felt the most collaborative and looked to empower my participants. With narrative analysis being described as "*research with, not on, people*" (Bleakley, 2005, p.535) this seemed like an obvious choice. For me the use of non-directive interviews allowed participants to decide what they wanted to discuss rather than me setting the agenda. I wanted them to feel like they were important characters in the development of a story, rather than research subjects who I analysed. When I began this research, I approached it from a social constructionist standpoint. This can be defined as a "*critical stance toward our taken-for-granted ways of*

understanding the world and ourselves” (Burr, 2015, p.2). Underpinning this is the idea that we construct our own reality, based on our previous experiences and the values and biases that we hold. I was therefore not in search of a truth, but the participants’ experiences. This seemed particularly apparent as my participants described wanting to further educate the UK population on military life and how to support amputees, however other research suggests the public feel they are supportive of Iraq and Afghanistan war veterans (Gribble et al., 2012). It may therefore be true that the public are supportive, however for me what was more important was how that support was conveyed, perceived and received. It did however feel too simplistic to say everything we experience is as a result of our interpretation, which completely discounts the idea of a ‘truth’. I would therefore say as my research progressed I identified more with critical realism, which argues there is a truth, however, it often exists outside of our conscious awareness (Archer et al., 2016). Equally, it claims that knowledge is inextricably linked to our cultural, societal and historical influences. Furthermore, it suggests that what we know is as a result of our own research, context and the standpoints of others. I could not deny that my participants had lost their leg, or legs, and therefore this felt as though it should be viewed as a truth. Equally, I could not deny that they had experienced adverse reactions from other people. However, it seemed more important that they were able to make sense of these experiences, potentially adapt their world-view and develop ways to cope. Also, in considering their narratives across a long period of time, but also their own perceptions and thoughts about societal perceptions, I hoped to consider a wider number of standpoints and historical influences through which their identity may have been constructed.

Although narratives are often used to create an ulterior reality through which people can step into a fantasy world, in keeping with psychodynamic principles I questioned whether we can ever truly separate ourselves from reality. In using narrative analysis, I therefore took the stance that the stories they chose to tell me were based on their truth of what has happened, but also did contain at least elements of true reality. Equally, in the Latin narrative (*narrare*) means “*to relate, recount, and give an account of*” (Johnston & Scholler-Jaquis, 2007, p.145). Through this it has been argued that knowledge is produced in conjunction with someone’s perceptions and therefore the narrative does not necessarily give a pure accurate account of what happened, but what they remember and experienced (Chambers, 1999). Equally, narratives have been used to pass on information and ‘words of wisdom’ throughout history and so to me this seemed to be an approach which allowed individuals to pass on knowledge in a way which we commonly do, rather than in a more, what I saw as forced and formal, interview style.

Narrative analysis is extremely broad and there are a number of ways to conduct narrative analysis. One obvious choice was whether to analyse parts of the story or to analyse the whole story. I chose to conduct holistic analysis again because I felt this would give me the opportunity to understand their story in the context of the rest of the story. When at first some parts of the interview felt like they may not be directly relevant to my research questions, I forced myself to step back and see how all elements of their story contributed to the person that they were today and their ability to adjust to life changing injuries. Equally, it was felt that using their overall narrative as the basis for my analysis would again help me to try and further understand their internal world, although I could never separate myself from my own interpretations. I

also wanted to, as much as possible, maintain the individuality of each of my participants. This is probably also what spurred me to do the research in the first place, as it seemed too simplistic to view all individuals, who had undergone amputation following serving in the military, as just ‘ex-military amputees’. Although we all like to identify with a group I suspected there was more to their identity than just this. Being a Christian it is always expected that first and foremost our identity lies in Christ, however it is recognised that continually we let the world identify who we are and take on other people’s perceptions into our identity.

My systematic literature review was also heavily influenced by my epistemology. In not wanting to look for the truth but to consider the multiple standpoints from which our experiences and our understanding of knowledge develops I decided to discount proxy measures or assumptions about adjustment for more directive methods allowing an individual to express their own views and opinions.

References

Archer, M., Decoteau, C., Gorski, P., Little, D., Porpora, D., Rutzou, T., et al. (2016).

What is Critical Realism. Retrieved from <http://www.asatheory.org/current-newsletter-online/what-is-critical-realism>

Bleakley, A. (2005). Stories as data, data as stories: Making sense of narrative inquiry in clinical education. *Medical Education*, 39(5), 534-540.

Brennan, J. (2001). Adjustment to cancer—coping or personal transition? *Psycho-oncology*, 10(1), 1-18.

Burr, V. (2015). *Social constructionism*. New York: Routledge.

Chambers, T. (1999). *The fiction of bioethics*. New York: Routledge.

Division of Clinical Psychology. (n.d). *The Division of Clinical Psychology*. Retrieved from <http://www.bps.org.uk/networks-and-communities/member-microsite/division-clinical-psychology>

Gribble, R., Park, A., Clergy, E., Curtice, J., Phillips, M., & Utting, D. (2012). *The UK's Armed Forces: public support for the troops but not their missions?* Retrieved from http://www.bsa.natcen.ac.uk/media/1150/bsa29_armed_forces.pdf

Higdon, J. (2011). *Psychodynamic theory for therapeutic practice*. London: Palgrave Macmillan.

Johnston, N., & Scholler-Jaquish, A. (2007). *Meaning in suffering: Caring practices in the health professions*. Wisconsin: University of Wisconsin Press.

Segal, H. (1994). Phantasy and reality. *The International Journal of Psycho-Analysis*, 75(2), 395.

Appendix T – Reflective Statement

I have often thought of my thesis journey as being like a horse race, probably the Grand National as is one of the longest races I know, with some of the most difficult fences. Needless to say my thesis journey felt long, with a number of great big hurdles to jump over. I decided to break this long overwhelming journey into smaller sections, which always culminated in a fence being successfully negotiated. Although there was a lot of anxiety prior to reaching those fences, there was also a sense of relief and elation when they had been overcome. The only problem was that once you had jumped over the fence you could see, someone had stuck another one, often bigger, in your way. Equally, although everyone dreams of winning, the reality of it is that if you get round without falling off, or injuring yourself, you should be extremely proud. My goal was therefore to get round, in one piece and cross the finish line.

Looking back at my last 6 years in higher education, but also my thesis journey I have come to learn so much about myself. I remember meeting my undergraduate buddy during fresher's week and in my hungover childish tired state asking "Do you have to do much reading? Because I don't really like reading?" She was unable to cover up the shocked and slightly worried look on her face and then proceeded to ask me why I was at university, as it is mostly reading. This was probably the first time I thought about why I even went to university, or that I had signed myself up to do a degree not just to move to a new place, have fun and do lots of dance. I'm guessing on that day my buddy did not have high hopes that I would make it through university, let alone progress to another 3 years of higher education. It might have taken me this long to realise but I do actually enjoy reading! Some people might say that doing 6 years of university is a very long way to discover whether you do or don't like reading, however, for me I have had an incredible experience and it has been worth the time it

took. I have also realised that I have a tendency to do things which I think are a good idea, but which I have not entirely thought through. Alternatively, Freud might have argued I just avoid the parts I don't want to and pretend that I have signed up to something which will be perfect for me. This is kind of how I felt when confronted with the idea of designing, conducting and writing a thesis. I like to jump in to the swimming pool, see how far I can swim before I feel as though I am drowning, and then reassess the situation. It was only recently, however, that I noticed other people sometimes survey the water and the route they are going to take before jumping in and reverting to frantic splashing to keep their head above water. It is however probably impossible to do a thesis without any planning or prior thought. The process also requires you to be very thorough. The process of doing my research has therefore not been smooth. Although I was forced to plan as much as possible, I probably still had a tendency to jump in and then would sometimes wish I had thought about it better. This was apparent even from the point at which I chose my topic.

Choosing a topic

I know its cliché to say but it seems like yesterday that I was accepted onto the course and beginning to consider what research topic I would like to pursue for the next 3 years. Seeing 'research fair' written on my timetable made the thesis, which everyone talked about, a reality. I could no longer avoid the fact that I had signed up to another 3 years of education. I had tried to downplay the scale of the thesis by thinking of it as something which you do mainly in your final year and that was only a third of the course that I had signed up to. I much prefer talking to writing, which is possibly why I came to consider Clinical Psychology as a career in the first place, however, when you sign up to do a doctorate the expectation is that you are able to communicate

through writing as well. Already I had dived into something which I wasn't really sure I could do, or even knew where to start. As I went round the university supervisors and said my main interest lay with trauma and military psychology, not many had a particular interest in the same topic, or others who had previously given it a go had decided it was not for them and so they no longer wanted to entertain the idea of researching people who had any association with the Ministry of Defence. I was beginning to consider other options, as it did not look hopeful that anyone would agree to take on a trainee who wanted to do something to do with the military. I was slightly disappointed at this point, although there were other topics I was interested in, 3 years felt like a long time and I couldn't guarantee I would still find those topics interesting. Thankfully, I managed to contact the people who would become my research supervisors and get them to agree to take it on. I became extremely excited at this point that it felt as if it might happen. Then I was told your thesis will almost entirely change from your first research proposal. I was a bit disappointed as I quite liked the topic I had proposed and the research I had thought about. Luckily for me, it didn't change drastically and I was able to continue with my interests. I had therefore already dived into a doctorate without really considering what a thesis would entail and then I had chosen a topic which was not going to be easy, but me being me decided I would do it.

Ethics, recruitment, interviews

Many people had warned me about the perils of applying for ethics. The form seemed lengthy and tedious, but relatively simple in most places. It did however require a thorough approach and coherent writing of what I intended to do - none of which I would profess to be naturally gifted at. Having successfully negotiated this, I was full

of energy to start recruiting and have the emails of willing participants flooding my inbox. This was the point at which for me it felt as though someone had snuck in and put up a few extra fences on my path, which I had not anticipated. I remember the excitement when I received the first emails of people who were interested in taking part, despite trying my best to remain calm and level headed in case they did not end up being interviewed, I felt as though my research would finally begin to take off. Unfortunately, none of these materialised into a participant interview. Again I felt as though my thesis may not happen, as nobody would be willing to take part. My first interview however did eventually come and was extremely interesting. I felt as though it reminded why I had chosen this topic and how important it was to consider peoples experiences and the influence we as a society have on that. I was therefore extremely happy to have done my first interview, however again I was left with no further contacts, and very few organisations who were willing to help with the recruitment process. I remember sitting in a meeting and one of my supervisors asking “What happens if you only get one person?” and then another in the calmest and politest way possible answering “then you don’t have a thesis!” I was still oscillating between feeling as though it would happen on one day and then the next feeling as though this would never happen and I should never have tried to do it. At this point the worried faces of the year above, during my third research proposal, who were wondering how on earth I would get enough participants came flooding back. This was another time I wished I had planned it better rather than just jumping in. A few more doors opened, I even did another ethics application to allow me to recruit directly through Help for Heroes, however, once again the door was slammed, as they decided they wanted amputees to do their research study and not mine. Many people had said how

interesting they thought my research would be and how excited they would be to read it, but at this time for me it did not feel like it would ever happen. I wanted the people who could help me get participants to be interested, so that it would actually happen! My mind had also made up a number of alternative options as to how I could adapt my research to see if this helped, or what research project I could do instead as I was struggling to believe that I would ever get enough participants to write up my thesis. At the time, it was advent and my calendar had quotes for each day, as well as the all-important chocolate. On day 13 it said “Life is like a rollercoaster, it has its ups and downs but it’s your choice to scream or enjoy the ride.” I can’t say it always felt like a choice and that I always enjoyed the ride, but, I felt I had no choice but to positively channel my frustration, anger and drive to complete this research. Luckily for me from there other doors opened and eventually I was able to recruit enough participants. I found each and every interview fascinating. I conducted 3 of them face to face which I felt made understanding the person and their situation easier, than the two I conducted over the telephone. Although I would love to say in future I would always conduct them face to face, that was my intention for this research and I guess this process has taught me to be adaptable. Although I may have got more out of interviewing those participant’s face to face, what they did tell me was so important and therefore I feel like my research would have missed so much if I had not spoken to those people, because they were too busy to be able to arrange a face to face meeting. Most of my participants were male, older than me and all of them had been in the army and undergone amputation. The differences between me and them could not have been more obvious. I wondered if this impacted on their willingness to talk to me but in the interviews it did not feel like this did, however I will never know if they would have

said more had we had more in common. Although at first I worried this created a barrier, I now wonder if this was an important step to begin to develop a bridge between able-bodied civilians and ex-military amputees.

Analysis and Write up

Having really enjoyed the interviews I thoroughly enjoyed analysing and organising the data, yes at times it felt overwhelming and like I had no idea what I was doing, but reading those quotes over and over made the process much more bearable. There was however a time when someone from the university looked at a few pages of one of my transcripts and said they would have used discourse analysis. Initially I panicked, but then I calmed down as I came to realise it didn't mean I was doing it wrong, I was just doing it differently. I then reflected on why I had chosen narrative research. As with anyone in the Clinical Psychology profession I was interested in their experiences and wanted to try and get an understanding of their world as separate to my agenda as possible. This was why using narrative instructions for the interviews appealed so much. Equally, it felt as though there would be many stages to their journey and many important people to consider, which appeared to fit with narrative analysis of form and content. Looking back however, if I had not been so keen to jump in and run with what I wanted to do, maybe I would have further considered discourse analysis. I feel that analysing my data in that way and would bring about some very interesting results. Therefore, if I was able to do the research again with the knowledge I have now I would consider using discourse analysis, however I thoroughly enjoyed using narrative methods and feel it fitted with who I was when I began the research. I also found that initially having analysed the data I used very concrete categories and phases, probably partly my influence but also the influence of the military way of

thinking. I then went back to explore the emotions and mood of the narratives and sections and found a wealth of information which I had somehow brushed over, or discounted. I have always known I am not one to overtly display many of my emotions, however I have become more aware of this through my client work but also through analysing the data. On the other hand, not being a particularly emotional person may be why I was interested in my topic, but also how I was able to manage listening to some pretty graphic descriptions of people being dismembered. It struck me that throughout my reading and analysis we are always striving to explain processes in a linear fashion. In reality however it was never that simple, the narratives of my participants and my analysis was not entirely linear; after all you do have to do two laps of Aintree before completing the Grand National.

Then came the dreaded write up! Having done all this hard work, I would love to have just told someone about it, or as we joked at the very start of this course presented it through interpretative dance. Obviously, that would not have been easier, but I felt it would have been more enjoyable. I also think I am better at dancing than writing! One dilemma, which I had expected, was deciding how to present my data in a way that made sense to those who did not know my participants and did not conduct the interviews. I had great difficulty in feeling as though I was doing my participants individual narratives justice, while also condensing my data into a set of information to be read. I think this was a continual struggle and although I chose to do it in the way I have, I will always feel there are nuances to each individual which were not captured in my write up. I also wondered if it would have been nice to discuss with the participants what pseudonym they would like me to use and why they chose it. Given my study was about identity I felt this would have also been really interesting.

Reflecting on it now however, I probably chose their names due to how I perceived them and my understanding of their narratives. Finally, I had to choose a journal to write my research for. At first I wanted to write it for a journal related to military psychology as this felt most relevant, however, few of these had a large enough word count for one thing. As I thought about it more my research was aimed at helping veterans become more embedded in civilian society or services and therefore a broader journal felt more appropriate.

Personal Assumptions

Having always been interested in the impact of the military on individuals and their adjustment back into civilian life I was intrigued by their experiences. Although I personally would like to live in a world where we do not need an army and that we are able to resolve differences without war and conflict, I have accepted that this is the reality of the world we live in and I therefore respect the individuals who are willing to risk their lives to protect our country. Through my clinical work I have also come to understand more about the military training and the impact it has on individuals. This has helped me to appreciate how effective the army are at training individuals to do their job. Conversely, I have also seen the difficulties that can result when individuals leave the army. I therefore felt that I wanted to give back something to these individuals who have done an extremely dangerous and difficult job. Equally, although my understanding of trauma has been constantly evolving throughout this thesis and my clinical work, I felt it was important to recognise the impact of certain events on individuals and their need for help and support. I also feel that the impact of trauma can be missed when there are immediate physical health consequences and therefore this was another driver to consider the impact of mental health on individuals

with a physical trauma. I was aware that there was a stigma around disability, but have always endeavoured to see the best in each individual and felt that the stigma around disability was reducing. I was therefore shocked and saddened to hear that this was not always the case.

Systematic Literature Review

This felt like the part of my thesis which was largely neglected or repressed until final year. I had noticed that much of the literature about veterans or military personnel was focused predominantly on physical health outcomes, with some consideration of mental health measures. It was however following an interview with one of my participants that I felt more strongly that we should consider an individual's perception of their adjustment, rather than the use of proxy measures. He told me how he drank a small amount of alcohol daily and he had PTSD, but that he felt as though he had adjusted really well and loved his new life as a civilian. This therefore gave me the topic for my literature review. Although this was another process which required planning, attention to detail and coherent writing, once again I learnt so much about my topic of interest and enjoyed seeing how both papers complimented each other to produce my final thesis portfolio.

Overall reflections

I have definitely become a much more reflective person and become much more aware of myself and the perspective through which I view the world. Even writing this statement, I reflected on how long it is and why I chose to write it today rather than next week (probably because I wanted to feel like I had achieved something as putting the final touches on my thesis feels like to final a job!). Like I said at the start I love to jump in and see what happens, but I hate finishing things off because it takes so much

time and attention to detail. Although I want the emotional rollercoaster to gradually level off, the final weeks posed the last fence before the race to the finish line, bringing with them the greatest feelings of excitement, joy and pride.