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Relationship Difficulties Among UK Military Personnel: The Impact of Socio-Demographic, Military and Deployment-Related Factors

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Relationship Difficulties Among UK Military Personnel: The Impact of Socio-Demographic, Military and Deployment-Related Factors

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Abstract

Military work, especially operational deployments, may impact the romantic relationships of military personnel. Using a sub-sample ($n=7581$) of participants from a cohort study of UK military personnel (data collected between 2007 and 2009), the prevalence of relationship difficulties and associations with socio-demographic, military, and deployment-related characteristics was examined. The majority of participants did not report experiencing relationship difficulties. Adjusted regression analyses indicate that childhood adversity, limited support for and from partners, being in unmarried relationships, financial problems, deploying for more than 13 months in three years, and work being above trade, ability and experience, were key factors associated with relationship difficulties. The likelihood of UK military personnel experiencing

relationship difficulties is increased due to personal vulnerabilities which may be exacerbated in the military context.

INTRODUCTION

There are certain aspects of military life, distinct from the civilian world, which may affect romantic relationships (Jarvis, 2011; Schumm, Nazarinia Roy, & Theodore, 2012; Segal, 1986). Military service places demands on personnel that have the potential to affect their romantic relationships such as frequent relocations, sometimes to different countries, long working hours, time away from home for training, and operational deployments (which may place military personnel at risk of injury or death). These demands often happen concurrently and are not optional or negotiable (Dandeker, French, Birtles, & Wessely, 2006; Jarvis, 2011; Segal, 1986).

Marital distress and instability can have negative effects on physical and emotional well-being and are reasons why people seek psychological assistance (Karney & Bradbury, 1995). Research investigating the romantic relationships of military personnel tends to focus on the impact of deployment. Newby et al. (2005) found that US active duty Army personnel deployed to Bosnia reported both positive and negative consequences of deployment. Married soldiers were more likely to report negative consequences including time away from family/missing important events and the deterioration of their marital relationship (Newby et al.). Schumm, Bell and Gade (2000) investigated a US peacekeeping unit, composed of reserve personnel, who had been deployed for at least nine months. Those who remained married showed no overall change in relationship

satisfaction. During deployment, however, some participants reported being less happy with their relationship. Schumm et al. propose that although during deployment marital satisfaction may decrease, this is transitory. Moreover, for those who did report relationship problems, these were often present prior to deployment (Schumm et al.). McLeland, Sutton, and Schumm (2008) investigated marital satisfaction across groups of military personnel before, during, and post deployment between 2005-2006. Compared to deployed participants, those anticipating or returned from a deployment reported lower marital satisfaction scores. The researchers concluded that separations from loved ones may affect levels of relationship satisfaction.

These results provide contradictory information on the impact of deployment upon relationships. It appears that relationship quality prior to deployments are likely to play a role in later potential relationship difficulties, however, it is possible that there are more factors, relevant to deployment experiences that may also be important to consider.

Viewing deployment as a unitary concept may be misleading (Karney & Crown, 2007); whereas specific deployment experiences may be a more fruitful area of enquiry. Longer deployments and deployment extensions are reported to be associated with spousal mental health problems (Orthner & Rose, 2009; Steelfisher, Zaslavsky, & Blendon, 2008), as well as problems communicating with the deployed military partner, spouses having difficulties continuing their jobs, and being dissatisfied with the Army (Steelfisher et al.).

One area of consideration is deployment length and the impact on the well-being of military personnel and their romantic relationships. In the US, operational deployments have historically been for an average of 12 to 15 months, however, a change in policy recommended the length of Army deployments be for nine months, starting April 2012 (McIlvane, 2011). In the UK, operational deployments tend to be of six-months duration. UK Harmony Guidelines (NAO, 2006) state that UK Army personnel should not deploy for longer than 13 months in a three year period. This means no more than two six month deployments in this time with one years' rest in between. Rona et al. (2007) investigated the effect of prolonged cumulative deployment and found that breaching harmony guidelines was associated with problematic alcohol use, psychological symptoms and reporting problems at home both during and following deployment.

A further deployment experience that may affect the romantic relationships of deployed military personnel could be associated with combat experiences. Ruger, Wilson, and Waddoups (2002) examined the impact of combat involvement on relationship stability in US military personnel who had served in World War 2, the Korean War and/or Vietnam. They found that combat increased the likelihood of a marriage ending. Gimbel and Booth (1994) investigated US Vietnam veterans and found that combat exposure was associated with marital adversity, however, adult antisocial behaviour mediated this effect (Gimbel & Booth). Recent research indicates that deployment and combat exposure are indirectly associated with marital satisfaction through symptoms of PTSD and depression (Allen, Rhoades, Stanley, & Markman, 2010; Renshaw, Rodrigues, & Jones, 2009). Service members affected by PTSD may become detached, be emotionally

unavailable, lack impulse control, be emotionally numb, and have a lack of interest in activities, all of which may affect post-deployment reintegration with their spouse or partner (Schumm et al., 2012).

Readjusting post-deployment may cause relationship difficulties if military personnel and their partner struggle to renegotiate and re-define roles, routines, and boundaries between their roles in the home (Bowling & Sherman, 2008; Faber, Willerton, Clymer, MacDermid, & Weiss, 2008; Reger & Moore, 2009; Rosen, Durand, Westhuis, & Teitelbaum, 1995; Wood, Scarville, & Gravino, 1995). During deployment separations, independence assists spouses to cope (Dandeker et al., 2006). Difficulties come about when spouses are required to relinquish their new found control and independence when the military partner returns (Gambardella, 2008). Bowling and Sherman (2008) found that wives who struggle to relinquish their control and independence may make the returned husband feel unwanted.

Rowe, Murphy, Wessely, and Fear (2012) investigated negative relationship change (e.g. married to divorced) across two time points in UK military personnel who had and had not deployed to Iraq. They found that deployment to Iraq since 2003 was not associated with negative relationship change. Military personnel mental health, younger age, childlessness, financial difficulties, believing the military did not provide enough support to their spouse, and family not providing enough support whilst deployed, were associated with relationship dissolution. This study, like much of the US research, did not, however, investigate factors associated with relationship satisfaction and quality. As

Karney and Crown (2007) suggest, to look purely at relationship stability is likely to be misleading and limited when evaluating the relationships of military personnel.

As well as considering the impact of the potential of stressors on the relationships of those serving in the military, coping ability should also be considered. Expansionist theory (Barnett & Hyde, 2001) suggests that perceiving work as satisfying, even when job demands are high, can positively impact and provide more energy for use in other areas of life such as romantic relationships. Desivilya and Gal (1996) identified key features of “well-adjusted” military families to include high job satisfaction, making use of family and organizational support, mutually agreed responsibilities for household chores and childcare, and spouses reporting good personal coping potential. Such coping strategies may assist in maintaining positive relationship experiences for military personnel.

The literature from the UK and the US provides inconsistent results regarding the impact that military life and deployments may have on the romantic relationships of military personnel. Deployment per se does not appear to directly impact upon relationship stability, however, deployment related factors such as length of deployment, combat exposure, mental health problems and the impact on post-deployment reintegration may be related. As well as deployment and related factors, Karney and Crown (2007) raise the importance of considering the “enduring traits” (socio-economic background, childhood adversity, lower educational attainment, and other personal factors) of military personnel when examining the impact of military life on their relationships. Research conducted by

Wilson and Stuchbury (2010) investigating romantic relationships in the general population suggests there are several socio-demographic characteristics associated with an increased risk of relationship dissolution. They include being younger, cohabiting but not being married, not having dependent children, having low educational attainment, low socioeconomic status, and experiencing previous marriage dissolution.

Many of the existing studies have used selective samples. For example, Allen, Rhodes, Stanley and Markman. (2010) and Renshaw, Rodrigues, and Jones (2009) used samples recruited from marriage education workshops and Gabardella's (2008) sample consisted of couples attending marriage counselling. The majority of the existing research into the effect of military life on relationships has been conducted in the US, with only a small number of studies evaluating UK forces. Furthermore, the majority of existing research has investigated only those who are in married relationships ignoring cohabiting and long-term committed non-cohabiting relationships. Moreover, research to date tends to focus on the impact of deployment on romantic relationships and not the impact of military life per se.

Given these limitations, the romantic relationships of UK military require investigation. Accordingly, the aims of this explorative research were in two stages 1) to examine the prevalence of relationship difficulties experienced among UK military personnel and investigate potential socio-demographics and military characteristics associated with relationship difficulties in a sample of UK military personnel regardless of if they had or had not deployed to Iraq and/or Afghanistan; and 2) to investigate potential deployment-

related experiences associated with relationship difficulties in a sub-sample of UK military personnel who had deployed to Iraq and/or Afghanistan.

METHOD

Data Source

The King's Centre for Military Health Research (KCMHR) are engaged in a longitudinal cohort study of a representative sample of the UK Armed Forces which, to date, has conducted two phases of recruitment and data collection (Fear et al., 2010; Hotopf et al., 2006). Phase 1 compared UK Armed Forces personnel deployed to the warfighting phase of the deployment to Iraq (the TELIC group) (18 January and 28 April 2003), with serving personnel who were not deployed to Iraq at this time (the 'Era' cohort). The UK Armed Forces give each military operation a code name, all campaigns are divided into operational phases which are sequentially numbered and each are of approximately six months duration. Operations to Iraq were called operation TELIC and TELIC 1 was the first deployment to Iraq (operations to Afghanistan were called HERRICK). Potential participants were identified by the UK Ministry of Defence's Defence Analytical Services Agency (DASA) (now called Defence Statistics). The TELIC 1 population included 46,040 individuals and the Era population 339,660 individuals. Special Forces and high security personnel were excluded for security reasons. Sampling was stratified by Service (Naval Services (Royal Navy and Royal Marines), Army or Royal Air Force) and enlistment type (regular or reserve; the latter are voluntary part time personnel who (may) also have civilian jobs); reservists were oversampled by a ratio of 2:1. Data were collected via self-report questionnaire between June 2004 and March 2006. The overall

response rate was 59% ($n = 10272$) (Hotopf et al.), with non-response mainly due to difficulties contacting personnel as a result of training, deployments or being posted to a new location.

Participants from Phase 1 were asked to participate at Phase 2 (the follow-up sample). In addition, Phase 2 included two further samples. A sample was recruited to represent the UK's expanding involvement in Afghanistan (the HERRICK sample); and, a new replenishment sample was recruited to represent those who had joined the military since Phase 1. Of the 10,272 Phase 1 participants, 914 could not be followed up as they had not given consent to be contacted again, had died, or were non-contactable due to insufficient address information. Participants from Phase 1 taking part at Phase 2 were termed the follow-up sample. 37 participants who had returned completed questionnaires following Phase 1 data collection were included in the follow-up sample at Phase 2. 9395 participants were entered into the data collection for Phase 2; 7884 were regular personnel and 1511 were reserves. Phase 2 data were collected between November 2007 and September 2009. Survey data were collected using self-completion questionnaires. The response rate for Phase 2 was 56% ($n= 9984$).

Stage 1

Sample:

All participants from Phase 2 of the KCMHR cohort study who were in a relationship at the time of questionnaire completion were included ($n=7581$). This sample consisted of 6817 males (89.9%) and 764 females (10.1%). There were 11825 (21.5%) Officers, 4315

Non-Commissioned Officer rank (NCO) (62.3%), and 1441 (16.1%) of other ranks. The mean age of the sample was 35.9 (Std. 9.20). The majority were married (68.2% $n = 5171$), 15.1% ($n = 1142$) were living with their partner, and 16.3% ($n = 1268$) (the reported percentages are weighted).

Outcome Measures:

Relationship satisfaction: Participants were asked “How satisfied are you with your marriage/relationship?” There were six possible responses: extremely satisfied (1); satisfied (2); neither satisfied nor dissatisfied (3); dissatisfied (4); extremely dissatisfied (5); and, not applicable (6). Not applicable responses were recoded as missing ($n = 114$) leaving 7467 responses. The remaining five response categories were collapsed to: satisfied, neither satisfied or dissatisfied, and dissatisfied.

Discussed divorce or separation in the last year: Participants were asked “Have you or your spouse/partner seriously suggested the idea of divorce or permanent separation within the last year?” Response options were yes (1), no (2), or not applicable (3). Not applicable responses were recoded as missing ($n = 457$) leaving 7124 valid responses.

Perceived impact of military career on relationship: Participants were asked “Overall, what impact has your military career had on your marriage/relationship?” Response options were: positive impact, negative impact, no impact, or not applicable. Not applicable responses were recoded to missing ($n = 382$) leaving 7199 valid responses.

Global relationship functioning: A composite score combining the individual measures described above was generated. Responses to all measures were given a score between 0 and one and then a composite score was made with the highest score being three.

Accordingly, a score of three indicates poorer relationship functioning as this would entail a participant reporting relationship dissatisfaction, having discussed divorce or separation in the last year, and negative impact of military career on relationship (each acquiring a score of one), compared to a score of 0 which would indicate reporting no relationship difficulties as per the three measures. Where a participant did not respond to any one of the three questions they were coded as missing for this composite variable. The purpose of the composite measure is to examine the most “at risk” group (those who report negative responses on the most relationship outcomes), therefore, the neither satisfied nor dissatisfied responses of the relationship satisfaction outcome are scored as 0.

Explanatory Variables:

Associations between all outcome measures and socio-demographic characteristics (age, gender, educational attainment, childhood family relationship adversity, childhood antisocial behaviour, relationship type, and parental status) and military characteristics (service, enlistment status, rank, serving status, deployment status, and total time deployed in the last three years) were examined.

Childhood adversity was assessed by two measures adapted from the Adverse Childhood Experience study scale (Thoits, 1995). The first assessed childhood family relationship adversity: comprising four positive items which were reverse scored (e.g. “I came from a

close family”) and four negative items (e.g. “I used to be hit/hurt by a parent or caregiver regularly”) (Iversen et al., 2007). These eight items were summed to form a cumulative measure and analysed as 0, 1 and 2+ (coded as 2 for analysis) adversities. The second measure assessed childhood antisocial behaviour. Participants were defined as having childhood antisocial behaviour if they answered yes to “I used to get into physical fights at school” plus one of the following; “I often used to play truant at school” or “I was suspended or expelled from school” or “I did things that should have got me (or did get me) into trouble with the police” (MacManus et al., 2011).

The guidelines for cumulative time deployed in a three year period is a maximum of 13 months for UK military personnel (NAO, 2006), consequently this was used as the cut off for examining total time deployed in a three year period in this study. Deployment status was conceptualised as deployment to Iraq and/or Afghanistan or not for the purpose of this study

Stage 2

Sample:

This study used a sub-group of participants from stage 1 who had deployed to either Iraq or Afghanistan ($n=3691$). Of this sample, 93.9% ($n = 3431$) were male and 6.1% female ($n = 260$). The mean age was 33.4 (std. 8.0). The majority were NCO rank (64.7%; $n = 2153$), with 18.6% ($n = 823$) Officers and 16.7% ($n = 715$) other ranks. 67.4% ($n=2373$) were married, 14.4% ($n =550$) living with their partner, and 18.2% (768) were in long term relationships.

Outcome Measures:

The outcome measures used in study 1 were used, plus an additional measure:

Relationship or family problems as a result of most recent deployment: Participants were asked “Did you have relationship or family problems as a result of your most recent deployment?” Response options were either yes (1) or no (2). Of the 3691 participants, 3439 (93.2%) provided a response.

Global relationship functioning: This measure was amended from that used in study 1 with the addition of the new outcome measure creating a composite variable with score range 0 – 4. The number of participants scoring 4 was small so the 3 and 4 score categories were combined.

Explanatory Variables:

In addition to the socio-demographic and military characteristics examined in study 1, the deployment-related experiences examined are presented in table 1:

Combat exposure was assessed using data collected on 13 specific experiences adapted from the combat experiences scale (Hoge et al., 2004) (e.g. gave aid to wounded; experienced a landmine strike; experienced an Improvised Explosive Devices (IED); had a mate shot/hit who was near you). Participants were asked to report the frequency of each experience during their most recent deployment. Possible responses ranged from ‘never’(0) to ‘10+ times’(4) on a five-point scale (scored 0-4). Scores were summed and ranged from 0-52 creating a continuous variable where a higher score indicated exposure

to more of the different types of experiences and higher frequency of exposure and lower scores indicating less variation in types and lower frequency (Sundin et al., 2013).

Analysis

Stage 1:

Regression analyses (multinomial for relationship satisfaction, perceived impact of military career on relationship and global relationship functioning and logistic for discussed divorce or separation) were conducted. Initially, unadjusted Multinomial Odds Ratios (MORs, for multinomial regression) or Odds Ratios (ORs, for logistic regression) and 95% confidence intervals were calculated for associations between each outcome measure and all explanatory variables. All explanatory variables significantly associated in the unadjusted analyses were included in a multivariable regression model.. A cut off of $p < 0.05$ was used to determine significance.

Stage 2:

Socio-demographic and military characteristics were re-examined for their associations with each outcome measure using the same approach from stage 1. ORs or MORs were calculated for associations between deployment-related experiences and each relationship outcome adjusting for socio-demographic and military characteristics. Full models were built for each relationship outcome including the socio-demographic and military characteristics and all significantly associated unadjusted deployment-related experiences as per the approach used in Stage 1.. A cut off of $p < 0.05$ was used to determine significance.

Sample Weights

Sample weights were created to account for the sampling strategies used. The weights reflected the inverse probability of a participant from a specific subpopulation and specific engagement type being sampled. Response weights were also created to account for non-response. Response weights were defined as the inverse probability of responding once sampled and driven by factors shown to empirically predict response (sex, rank, age and sample). Based on the assumption that the data are missing at random and that the observed variables modelled to drive non-response were correctly identified, the weighted analyses provide valid results. A combined weight was generated by multiplying the sample and response weights (Fear et al., 2010). All analyses were conducted in STATA 11.0 (StataCorp, 2009) and used the survey commands and sampling weights.

RESULTS

Stage 1

Prevalence of relationship difficulties in the UK military: The majority of this representative UK military sample report being satisfied with their relationship (86.8%, $n = 6473$), having not discussed divorce or separation in the last year (81.9%, $n = 5840$), either reporting no impact (32.2%, $n = 2280$) or a positive impact (25.2%, $n = 1808$) of their military career on their relationship, and have a global relationship functioning score of 0 (51.9%, $n = 3535$).

Socio-demographic and military characteristics associated with relationship difficulties:

Examination of potential socio-demographic and military characteristics associated with

the measured relationship outcomes indicated that: *Relationship dissatisfaction* was significantly associated with childhood family relationship adversity, being in a long term relationship, having children, and being a reserve; *Discussing divorce or separation in the last year* was associated with childhood family relationship adversities, childhood antisocial behaviour, co-habiting or being in a long term relationship, having children, being in the Army, being a NCO, serving as a full time regular, and having deployed; *Reporting a negative impact of military career on relationship* was significantly associated with being younger, male, childhood family relationship adversity, co-habiting or being in a long term relationship, serving as a full time regular, having deployed for more than 13 months in three years, and still serving compared to left service. A *global relationship functioning* score of 3 (endorsing all three relationship difficulties measured) was associated with childhood family relationship adversity, childhood antisocial behaviour, being in a long term relationship compared to being married, deploying for more than 13 months in three years, and still serving compared to having left service (table 2).

Stage 2

Prevalence of relationship difficulties in deployed military personnel: The prevalence of relationship difficulties when examining only those military personnel who had deployed is similar to the entire sample in stage 1 (relationship satisfaction, 86.9%; discussed divorce or separation, 78.7%; no impact of military career on relationship, 29.2% and positive impact of military career on relationship, 22.7%; and global relationship functioning score of 3, 9.0%). The additional variable “relationship or family problems as

a result of their most recent deployment” was investigated and indicates that the vast majority (84.9%) do not report this.

Relationship or family problems as a result of most recent deployment: associated socio-demographics and military characteristics: The additional measure “relationship or family problems as a result of most recent deployment” was used in stage 2 when investigating only those who had deployed. Examination of associations between this variable and possible socio-demographics and military characteristics provided adjusted ORs showing that reporting relationship or family problems as a result of most recent deployment was associated with childhood family relationship adversity, childhood antisocial behaviour, and deploying for more than 13 months in a three year period (table 3).

Deployment-related factors associated with relationship difficulties (table 4): Relationship satisfaction: Adjusted MORS show that relationship dissatisfaction was associated with feeling unable to go to anyone in the unit with personal problems and not receiving enough support from family whilst deployed.

Discussing divorce or separation in the last year: Adjusted ORs show that having discussed divorce or separation in the last year was associated with feeling that work was generally above trade, experience and ability, combat exposure, feeling that the family did not provide enough personal support whilst deployed, financial problems at home whilst deployed, and perceiving the military not to have provided any support to the spouse whilst deployed .

Impact of military career on relationship: Adjusted MORs show that, reporting a negative impact of military career on relationship was associated with reporting work to generally be above trade, experiences, and ability, spending one week or more in a hostile area, feeling uninformed about what was happening in the unit, not receiving enough personal support from the family whilst deployed, financial problems at home whilst deployed, and believing the military did not provide any support for the spouse whilst deployed.

Relationship or family problems as a result of most recent deployment: Adjusted ORs show that, relationship or family problems as a result of most recent deployment were associated with believing that one was in serious danger of injury or death on at least one occasion, combat exposure, feeling that the family did not provide enough support whilst deployed, financial problems at home whilst deployed, and believing the military did not provide enough support or any support for the spouse whilst deployed .

Global relationship functioning: Adjusted MORs show that, having a global relationship functioning score of 3 was associated with reporting work to be above trade, ability or experience, believing to be in serious danger of injury or death, not receiving enough support from family whilst deployed, experiencing financial problems at home whilst deployed, and believing the military did not provide enough or any support for the spouse whilst deployed.

DISCUSSION

To date, the romantic relationships of the UK military have been the subject of limited investigation. A two stage study was conducted investigating the prevalence of relationship difficulties experienced by the UK military and factors that were significantly associated with them. Overall, this research indicated that the majority of military personnel sampled report their relationships to satisfied, stable, not impacted by their military career, and not affected by recent deployment. The key factors associated with reporting relationship difficulties were childhood adversity, not being supported by your spouse/partner whilst deployed, spouse/partner not receiving enough support from the military during deployment, financial problems during deployment, deploying for more than 13 months in a three year period, and work during deployment being above trade, ability and experience.

Prevalence Of Relationship Difficulties In The UK Military

The majority of the UK military personnel included in this study reported having relationships that are satisfied, stable, not negatively impacted by their military career, do not have relationship or family problems as a result of deployment, and have a global relationship functioning score of 0 (i.e. no relationship difficulties). This is consistent with research examining US military personnel (Karney & Crown, 2011; Sheppard, Malatras, & Isreal, 2010). Anderson et al. (2011) report in their investigation of US Army soldiers, that 82% were satisfied or very satisfied with their marriages. Riggs and Riggs' (2011) theoretical paper, investigating resilience in military families in terms of a family attachment network model, states that over the last 10 years the majority of veterans and

families in the US have demonstrated a positive adaptation during and after operational deployment. Sheppard, Malatras and Israel (2010) report in their literature review that a wealth of literature supports the idea that military families are generally resilient.

Socio-Demographic, Military Characteristics And Deployment-Related Factors Associated With Relationship Difficulties Among The UK Military

Both stages of this research suggest that childhood family relationship adversity and lack of support from family whilst deployed were the most important factors associated with relationship difficulties among UK military personnel. Both of these factors were associated with all of the relationship difficulties examined. Being in an unmarried relationship, spouse not receiving support from the military during deployment, and financial problems were also highly important factors associated with relationship difficulties among UK military personnel; each was associated with four of the five relationship difficulties examined. Deploying for longer than 13 months in three years and work being above trade, ability and experience were important work related (military and deployment-related) factors each associated with three of relationship difficulties examined. Being a reservist was associated with relationship dissatisfaction, but being a regular is associated with discussing divorce or separation and reporting a negative impact of military career on relationship.

Socio-Demographics And Home Front Factors

Childhood Adversity:

The links between childhood trauma, adversity and maltreatment and relationship difficulties, in the general population are well known (DeLillo et al., 2009; Whisman, 2006). Childhood adversity is thought to be related to problems with intimacy, trust, sexual relationships, heightened physical violence, emotional problems and psychological aggression in adult life (DeLillo et al., 2009; Whisman, 2006). Experiences of childhood adversity are a common pre-enlistment vulnerability in the UK Armed Forces (Iversen et al., 2007), especially the Army, which has historically recruited from areas of lower socio-economic status. This suggests that the UK military may recruit certain individuals who may be at increased risk of experiencing relationship difficulties.

Not Receiving Enough Support From Family Whilst Deployed:

Support from partners can buffer relationships from the effects of external stress, such as work enforced separations (Hosek & Martorell, 2011; Neff & Karney, 2004). Greenhaus and Beutell (1985) report that spouses who are supportive protect each other from experiencing high levels of work/family conflict, thus not receiving enough support from your partner during deployment may increase the likelihood of experiencing relationship difficulties.

Frequent contact and sharing of meaningful dialogue helps to maintain positive relationships whilst deployed (Baptist et al., 2011), however, reduced access to communication means, scarce technology and operational security may play their part in disrupting communication (Greene, Buckman, Dandeker, & Greenberg, 2010; Hinojosa, Hinojosa, & Hognas, 2012) and therefore the ability to provide support. In the context of

recent deployments to Iraq and Afghanistan, high expectations of the level, availability, and variety of communication media available may have developed among military personnel and their families (Greene et al.). Operational demands may constrain communication and inhibit family support. Greene et al. proposed that ensuring military personnel and their families have realistic expectations regarding communication availability during deployment separations may help to minimise relationship difficulties.

Unmarried Relationships:

Co-habiting relationships are reported to be more unstable than married relationships (Wilson & Stuchbury, 2010). Having confidence in the future of a relationship and feeling there is dedication or personal commitment to its long standing stability are associated with relationship satisfaction and functioning (Stanley, Markman, & Whitton, 2002). All of these factors may be reduced for those who are not married, especially those not living together.

In the military context, maintaining relationships for unmarried personnel may be more challenging. Unlike married military couples, unmarried military couples are not entitled to subsidised housing on or near a military base, thus enabling easy access to military and peer support ("Defence Infrastructure Organisation: Service Family Accommodation (SFA)," 2013) and subsidised boarding school places (Harvey, 2011). Such benefits may make military life more manageable and aid the maintenance of relationships. Anderson et al. (2011) found that US Army personnel in unmarried relationships were more likely

to be in “distressed” relationships because they did not have access to the benefits used to support married personnel.

Military Providing Enough Support For Spouse During Deployment:

Rowe et al. (2012) found that believing the military did not provide enough support for the spouse during deployments was associated with negative relationship change.

Research indicates that secondary support systems such as those provided by a partner’s work organisation provide a supportive set of services that help make work enforced separations more manageable (Orthner & Rose, 2009). In the military context, it is reported that a feature of well-adjusted military families is the presence and use of organisational support (Desivlya & Gal, 1996).

Confidence and positivity about family support can impact deployed personnel’s morale (Dandeker, Eversden, Birtles, & Wessely, 2013), can be important for family adjustment (Rohall, Segal, & Segal, 1999), and may help to reduce concerns about potential home front problems which may positively impact upon mental health (Mulligan et al., 2012).

Karney and Crown (2011) report that one reason for their finding that deployment was not associated with relationship problems could be due to the specific formal and informal institutionalised sources of support offered to military personnel and their families. This is consistent with Orthner and Rose (2009) who state that secondary support systems such as those provided by a partner’s work organisation provide a supportive set of services that help make work enforced separations more manageable.

Desivlya and Gal (1996) conducted research investigating the coping patterns in the

families of Israeli military personnel. They identified three types of well-adjusted families and three types of un-reconciled families. A common feature across all three well-adjusted family types was the presence and use of organisational support.

Expectations of what level of support the military should provide may impact relationships. Saltzman et al. (2011) report that support expectations are associated with risk and resiliency in military families. Rowe et al. (2012) suggest that military personnel may blame the military for their spouses feeling unsupported and attribute post-deployment relationship problems to the perceived lack of military support to spouse.

Financial Difficulties:

The association between financial problems and relationship difficulties found in this study is consistent with Rowe et al. (2012) and Karney and Crown (2011) who report that financial difficulties are significantly associated with a higher risk of relationship dissolution compared to couples who are financially sound. Buckman et al. (2011) suggest financial problems often accompany extended or longer deployments as spouses may have to reduce hours of work or leave work altogether to fulfil childcare commitments. Better spousal coping during separation is related to greater financial resources (Wood, Scarville, & Gravino, 1995). Poor deployment-related adjustment in spouses can lead to reduced mental health and problems coping (De Burgh, White, Fear, & Iversen, 2011). Coping in spouses is an important factor negatively associated with relationship difficulties during and after deployment separations (Wood et al.). Experiencing financial difficulty is associated with wives perceptions of how well they

coped with the separation (Coolbaugh & Rosenthal, 1992). Soldiers are reportedly proud of spouses who handled family affairs well in their absence, which leads to better relationship adjustment and positive views about future separations for both military personnel and their partners (Coolbaugh & Rosenthal, 1992; Wood et al., 1995).

Military Work Factors

Deployment Length:

The current study indicates that deploying for longer than 13 months in three years is associated with relationship difficulties for UK military personnel. This is consistent with existing literature showing that deploying for longer lengths of time is associated with problems at home during and after deployment, spousal mental health difficulties (Orthner & Rose, 2009; Steelfisher et al., 2008), an increased likelihood of spousal occupational difficulties, and dissatisfaction with military life (Steelfisher et al.). Both the current study outcomes and existing literature support adherence to the UK Harmony Guidelines (NAO, 2006).

Gambardella (2008) found that the couples who had the most difficulties returning to their former marital roles were those who had deployed for more than 18 months.

Gambardella reported that this was related to these spouses struggling to return to their previous roles or negotiate new adjusted roles that were mutually satisfying and acceptable. A large part of this was spouses having got used to doing things on their own and being independent (Gambardella). Spouses who learn to be independent and cope during deployment separation are likely to manage the separation successfully. Such

independence over an extended time, however, may increase the challenge of reintegration post-deployment which might lead to relationship difficulties.

Work Was Above Trade, Experience, Or Ability:

Increased job demand is reported to increase conflict between work and family (Voydanoff, 1988). Role expansion theory (Barnett & Hyde, 2001) proposes that positive experiences or being satisfied in one role helps to shape positive experience and performance in other roles. In the context of deployment when the role as relationship partner is already strained, the addition of increased work stress and strain is likely to exacerbate the potential for relationship difficulties. Desivlya and Gal (1996) report that problems or difficulties with work are an antecedent and mediating factor shaping coping and family outcomes.

Engagement Type:

Reserve personnel were more likely to report being dissatisfied with their relationship, whereas regular personnel are more likely to report having discussed divorce or separation and a negative impact of military career on relationship in this study. Reserve personnel tend to be older, have higher educational attainment, often deploy as individual augmentees, meaning they deploy without members of their usual home unit, and have the additional challenge of leaving partners and families who may not understand the military and support available (Browne et al., 2007). The increased likelihood of reporting dissatisfaction in reserves may be attributable to their older age and the associated possibility that they would have been in their relationship for longer. Karney

and Bradbury (1995) report that whilst marriages tend to become more stable over time, they are also likely to become less satisfying. An additional interpretation could be that dissatisfying relationships motivate people to join the reserves.

Regular personnel's increased likelihood of reporting a negative impact of their military career on their relationship is consistent with the lower frequency of deployments by reserves and the reserves lower training demands compared to regular personnel; consequently the impact of a military career is more profound for regulars where their military career becomes their life.

Combat Exposure:

This research indicates that combat exposure is associated with two of the relationship outcomes but with small effect sizes. Although links between combat and marital outcomes are reported in US research (Ruger, Wilson, & Waddoups, 2002). , the retrospective methods and focus on historical wars in these studies makes generalising to the recent conflicts in Iraq and Afghanistan questionable. Recent research shows that combat exposure is unrelated to marital quality (Renshaw, Rodrigues, & Jones, 2008; Riviere, Merrill, Thomas, Wilk, & Bliese, 2012).

Strengths And Limitations

This research adds to current literature as one of few studies investigating the relationships of the UK military. The inclusion of different relationship types (married, co-habiting, long term), investigating relationship difficulties, opposed to dissolution, and

investigating the military career as a whole, not just deployment periods, adds to current literature. The use of a large representative sample of the UK Armed Forces means it is possible to generalize these results to the UK Armed Forces.

A limitation is that the results are from the military personnel's perspective only. Relying on one member of the partnership may give a biased view as couples often perceive their relationship differently (Karney & Crown, 2007). The data are cross sectional, therefore causation cannot be inferred. It is also not possible to know if the married participants were in their first or subsequent marriage. The course and functioning of re-marriages are thought to have nuanced trajectories and challenges (Adler-Baeder, Pittman, & Taylor, 2006). It is not known if the relationships were already formed when personnel joined the military or commenced subsequent to their military careers. Being in a relationship prior to joining the military could have more negative effects on the relationship as it could change the course of the relationship trajectory (Wilmoth & London, 2013). A further limitation is that non-response of participants in the KCMHR cohort study was mostly related to training, deployments or being posted to a new location, all of which are factors closely related to the military factors being explored in this study. The use of single item outcome measures and non-standardised or validated measures should also be considered when interpreting the results, as should the tendency of ORs to exaggerate effect size (Lieberman, 2005).

Implications And Recommendations

Factors potentially increasing the likelihood of experiencing relationship difficulties are identified and an “at risk” group of UK military personnel proposed who services and policy might be tailored towards. This “at risk” group includes those with a history of Childhood adversity, are in an unmarried relationship, service personnel who receive limited support from their family during deployment, service personnel with family who receive limited support from the military during operational deployments, those who had longer deployments in breach of the Harmony Guidelines, and work demands being above trade, experience and ability during operational deployments.

Due to the increased likelihood of relationship problems for those with childhood adversity, resiliency training is proposed as a potential intervention for married and unmarried couples. The suggestion of resiliency training is consistent with existent services in the US (Gottman, Gottman, & Atkins, 2011; Saltzman et al., 2011).

Unmarried personnel seem to be more likely to report relationship difficulties. A potential reason may be attributable to military life in that their partners have restricted access to military welfare services and support from other military partners/spouses.

Finding ways to promote peer support among unmarried partners and opening up military welfare services to them may assist in limiting the vulnerability of unmarried relationships. This should, however, be considered in the limited context of the current economic climate and the downsizing of many sectors of the UK military. This research provides evidence to support adherence to the UK Harmony Guidelines (NAO, 2006).

Further research is required to investigate the experiences of reserve personnel. This research indicates that reserves are less likely to be satisfied with their relationship compared to regulars, but due to the relatively small numbers of reserves in the sample, stratified analyses were not conducted. Differences between the military experience for regulars and reserves indicates that they are likely to experience managing their relationships in the context of their military service differently due to the differences in their deployment experiences and the additional stress of having to reintegrate to civilian work and life (Browne et al., 2007; Riviere, Kendell-Robbins, McGurk, Castro, & Hoge, 2011). In the context of proposed plans to move to a more reserve-dependent military (Brooke-Holland & Rutherford, 2012), closer examination of the vulnerabilities and resiliencies of the relationships of reserve personnel is important. Due to the unstandardised and non-validated measures used in this research, future research should aim to employ more robust measures of the different dimensions of relationship quality and stability.

CONCLUSION

The relationships of UK military personnel are mainly strong and cope with the additional strains of military life as indicated by the low prevalence of reported relationship difficulties in this research. The key factors associated with UK military personnel reporting experiencing relationship difficulties were related to socio-demographic characteristics and home front affairs. These factors are likely to increase the vulnerability of any relationship to difficulties; this is, however, exacerbated in the military context, especially when deployments are for longer than recommended by the

Harmony Guidelines (NAO, 2006) and work is above trade, experience or ability during deployment.

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Table 1. Deployment-related experiences investigated in study 2

Deployment Experiences	Response Categories
Last deployment location	Iraq Afghanistan
Total number of deployments to Iraq and/or Afghanistan	1 2 3+
Role in theatre	Combat Combat support Combat service support
Does my work in-theatre match my trade experience or ability	Yes No, generally above my ability No, generally below my ability
Perceived to be in serious danger of injury or death	Never Once or twice Sometimes Many times
Time in a hostile area	Not at all Up to one week One week to one month More than a month
Combat exposure	Continuous variable (0-52)

<i>Unit Cohesion:</i>	Agree
My unit provided support for personal problems	Neither Disagree
I felt informed about what was happening in my unit	Agree Neither
Seniors were interested in what I did	Disagree Agree Neither Disagree
I did not receive enough support from my family whilst I was deployed	Disagree Agree
The military provided enough support for my spouse whilst I was deployed	Yes, it was enough Yes, but it was not enough No, no support provided
I had serious financial problems at home during deployment	Disagree Agree
I received a verbal homecoming brief?	No Yes

Table 2. Adjusted† MORs/ORs and 95% confidence intervals for socio-demographic and military characteristics associated with relationship difficulties (MORS or ORs included in the model for each outcome measure are shown)

<i>Socio-demographics</i>	Dissatisfied with relationship	Discussed divorce or separation	Negative impact of military career on relationship	Global relationship functioning = 3
Age at questionnaire completion (years)	-	-	0.98 (0.97 – 0.99)***	-
Gender				
Male	-	-		-
Female	-	-	0.72 (0.56 – 0.91)**	-
Childhood family relationship adversity				
0				
1	1.19 (0.84 –	1.16 (0.94 –	1.02 (0.85 –	1.42 (0.87 –

	1.69)	1.42)	1.23)	2.30)
2+	1.89 (1.45 – 2.47)***	1.48 (1.24 – 1.76)***	1.42 (1.21 – 1.66)***	2.42 (1.63 – 3.59)***
Childhood antisocial behaviour				
No	-			
Yes	-	1.37 (1.13 – 1.66)***	1.31 (1.06 – 1.60)***	1.60 (1.06 – 2.41)*
Relationship type				
Married				
Co-habiting	0.93 (0.63 – 1.37)	1.63 (1.31 – 2.03)***	1.26 (1.02 – 1.57)*	1.38 (0.75 – 2.52)
Long term relationship	1.67 (1.18 – 2.36)**	2.10 (1.66 – 2.65)***	1.69 (1.34 – 2.14)***	3.30 (1.97 – 5.49)***
Parental status				
No				
Yes	1.43 (1.08 – 1.89)**	1.68 (1.41 – 1.98)***	1.15 (0.98 – 1.34)	-
Military characteristics				

Service				
Naval services	-	0.75 (0.60 – 0.94)**	-	-
Army	-		-	-
RAF	-	0.80 (0.66 – 0.98)*	-	-
Rank				
Officer	-	0.70 (0.57 – 0.85)***	1.49 (1.25 – 1.77)***	-
NCO	-			-
Other rank	-	1.15 (0.94 – 1.42)	0.93 (0.75 – 1.16)	-
Enlistment type				
Regular				-
Reserve	1.71 (1.27 – 2.31)***	0.77 (0.62 – 0.97)*	0.57 (0.46 – 0.71)***	-
Deployment				
Not deployed				-
Deployed		1.25 (1.07 – 1.46)**	-	-
Time deployed in last 3 years				

Less than 13 months	-	-		
13 + months	-	-	1.85 (1.42 – 2.40)***	1.80 (1.04 – 3.12)*
Serving status				
Serving	-	-		
Left	-	-	0.56 (0.47 – 0.67)***	0.42 (0.26 – 0.70)***

NB: Satisfied, not discussed divorce or separation, positive impact and a score of 0 used as reference category; MORs/ORs are weighted; † Relationship satisfaction model adjusted for childhood family relationship adversity, relationship type, parental status, engagement type and serving status. Discussed divorce or separation model adjusted for childhood family relationship adversity, childhood antisocial behaviour, relationship type, parental status, service, rank, engagement type, and deployment. Impact of military career on relationship model adjusted for age, gender, childhood family relationship adversity, childhood antisocial behaviour, relationship type, parental status, service, rank, engagement type, time deployed in the last three years and service status. Global relationship functioning model adjusted for age, childhood family relationship adversity, childhood antisocial behaviour, relationship type, parental status, rank, engagement type, deployment, time deployed in the last three years, and serving status; * p <0.05, ** p <0.01, *** p <0.001

Table 3. Adjusted† ORs and 95% confidence intervals for socio-demographic and military characteristics associated with relationship or family problems as a result of most recent deployment

<i>Socio-demographics</i>	Relationship or family problems post-deployment
Childhood family relationship adversity	
0	
1	1.42 (1.01 – 1.99)*
2+	1.50 (1.12 – 2.01)**
Childhood antisocial behaviour	
NO	
Yes	2.14 (1.61 – 2.84)***
<i>Military factors</i>	
Time deployed in last 3 years	
Less than 13 months	
13 + months	1.47 (1.05 – 2.05)*

NB: No relationship or family problems is used as reference category; ORs are weighted; †; Adjusted for all variables in the table; * p <0.05, ** p <0.01, *** p <0.001

Table 4. Adjusted† MORs/ORs and 95% confidence intervals for deployment-related experiences associated with relationship difficulties

Deployment experiences	Dissatisfied with relationship	Discussed divorce or separation	Negative impact	Relationship or family problems post-deployment	Global relationship functioning = 3
Work matched trade, experiences, ability					
Yes					
No, generally above my ability	-	1.92 (1.32 – 2.79)***	1.81 (1.14 – 2.87)**	-	1.99 (1.08 – 3.69)*
No, generally below my ability	-	1.12 (0.69 – 1.82)	0.95 (0.57 – 1.58)	-	0.93 (0.39 – 2.25)
Believe in					

serious danger of injury or death					
Never					
Once or twice	-	-		1.73 (1.00 – 2.97)*	1.66 (0.80 – 3.43)
Sometimes	-	-		1.73 (1.01 – 2.97)*	2.02 (0.98 – 4.19)
Many times	-	-		2.05 (1.15 – 3.65)**	3.00 (1.46 – 6.16)**
Time in a hostile area					
Not at all					
Up to one week	-	-	1.09 (0.78 – 1.52)	-	-
One week to one month	-	-	1.53 (1.08 – 2.16)***	-	-
More than a month	-		1.77 (1.28 – 2.44)*	-	-
Combat exposure	-	1.01 (1.00 – 1.02)*		1.01 (1.00 – 1.02)*	-

Support for personal problems from unit					
Agree					
Neither	0.91 (0.57 – 1.46)	-	-	-	-
Disagree	1.88 (1.21 – 2.91)**	-	-	-	-
Felt informed about what was happening in my unit					
Agree					
Neither	-	-	0.99 (0.71 – 1.37)	-	-
Disagree	-	-	1.74 (1.18 – 2.56)*	-	-
I did not receive					

enough support from my family whilst deployed					
Disagree					
Agree	3.42 (2.22 – 5.25)***	1.43 (1.01 – 2.02)*	1.74 (1.18 – 2.56)*	1.53 (1.04 – 2.25)*	3.44 (2.07 – 5.71)***
Military provided support for my spouse whilst I was away					
Yes, and it was enough					
Yes, but it was not enough	-	1.33 (0.97 – 1.83)	1.31 (0.97 – 1.78)	1.63 (1.11 – 2.38)**	2.33 (1.32 – 4.10)**
No, no support was	-	1.41 (1.06 – 1.88)*	1.84 (1.39 – 2.44)***	2.20 (1.58 – 3.07)***	3.11 (1.93 – 5.03)***

provided					
Serious financial problems at home whilst deployed					
Disagree					
Agree	-	2.50 (1.46 – 4.26)***	2.27 (1.15 – 4.49)*	3.63 (2.07 – 6.34)***	4.68 (1.96 – 11.13)***

NB: Satisfied, not discussed divorce or separation, positive impact, no relationship or family problems, and a score of 0 are used as used as reference category for the respective relationship difficulties; MORs/ORs are weighted; * p <0.05, ** p <0.01, *** p <0.001