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**Intermittent Separation:
Exploring the psycho-social impact
on dispersed military families**

A K Osborne

PhD

2020

**Intermittent Separation:
Exploring the psycho-social impact
on dispersed military families**

Alison Kay Osborne BSc, MRes

A thesis submitted in partial fulfilment of
the requirements of the University of
Northumbria at Newcastle for the
degree of Doctor of Philosophy

Faculty of Health and Life Sciences

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Abstract

Background: The perceived role and identity of the military family is shifting alongside new policies and models from the Ministry of Defence, increasing flexibility of serving personnel and encouraging stability. Data from the last five years suggests that approximately 24% of military families are already living geographically dispersed from the serving member of their family, although it is unclear as to where these families reside. Separation is central to dispersed military family life, however, current evidence is limited to the effect of operational deployments on spouses and children. Due to the large number of military families estimated to be living dispersed, and lack of research focusing on how this affects family psychological and social well-being, this study aims to explore the psycho-social impact of intermittent separation on dispersed military families.

Design: A mixed methods, Explanatory Sequential Design was utilised with two phases and employed Pragmatism as the underpinning methodology. The purpose of the first phase was to provide an understanding on what is already known about dispersed military families and separation. Phase 1a involved a systematic narrative review to answer the question: what is the impact of separation on military families? Phase 1b reported geospatial analysis of publicly available data to determine if there was a suitable proxy variable for the geolocation of dispersed military families. Phase 2 provided primary research findings through semi-structured interviews with spouses, partners, and children of UK military personnel.

Phase 1a: The systematic narrative review critically evaluated existing literature on the impact of separation on military. Databases were searched for papers available between January 2001 and July 2018. Papers were excluded if: not written in the English language, were about relationship issues or problems, were about wounded injured or sick personnel, were about pregnancy or postpartum, were about veterans or transition, looked at interventions or the use/development of services, focussed on child or sibling deployment, or were about domestic violence or maltreatment. Eighteen papers were accepted for use in the systematic narrative review. Six main themes were generated through thematic analysis from the papers reviewed: Stress, Depression, Psychological Well-Being, Relationships, Support and Life Experiences.

Review findings indicated that military families' experiences impact their psychological well-being during military-induced separations with specific increases in stress, depression, and anxiety symptoms. Communication and relationships were also affected, but social support can mitigate the psychological effects of separations. Higher

levels of social support were significantly associated with better psychological health, fewer depressive symptoms, and lower levels of stress.

Phase 1b: Phase 1b explored existing publicly available data to determine if there was an appropriate proxy dataset for the geolocation of dispersed military families. Multiple datasets were examined measuring the locations of military personnel, Census data on the Armed Forces household reference person, and data on Service Child Pupil Premium (SPP). Geospatial analysis was carried out to visualise the data at the local authority level. A family estimate was created using SPP data and fertility estimates. In order to consider a proxy variable for dispersed military families, the SPP family estimate and data on the location of military personnel were considered. Data was isolated for local authority areas where there were no military personnel but there was an estimate of military families. This isolated dataset tentatively represented the geolocation of dispersed military families across England. However, there were too many caveats to the data to be a plausible proxy variable. Consequently, findings from Phase 1b argued that there is no publicly available dataset that can act as a suitable proxy for the geolocation of dispersed military families due to the number of limitations on the data.

Phase 2: As a result of the findings from Phase 1, Phase 2 sought to explore the psychosocial impact of intermittent separation on dispersed military families through primary research. Twenty-eight semi-structured interviews were carried out with civilian spouses, partners, and children of dispersed UK military personnel over the age of 16; to gain a greater understanding of their experiences. Five themes were generated through Framework Analysis: Identity, Loneliness, Well-Being, Familial Relationships and Accessing Support.

Interview findings indicated that dispersed military families experience a number of challenges as a result of separation. The perceived view and lack of understanding of dispersed military families in both civilian and military community was at the centre of participants' experiences. Consequently, this affected how participants viewed themselves, suggesting fluctuation in identifying with the military and how they access support networks. Participants' ability to cope with separation was critically linked to their outlook on the dispersal. A normalisation of the dispersal was reported by those with prior dispersal experience. An acceptance of their situation or a positive outlook helped to alleviate some of the negative consequences of separation along with appropriate support networks. Regardless, participants were clear that dispersal was challenging, and this was exacerbated by the intermittent nature of the separation.

Conclusions: By integrating the findings from Phase 1 and Phase 2, six overarching concepts were discussed in terms of existing theories and research: Military Identity, Loneliness, Stability and Dispersal, Psychological Well-Being, Resilience and Coping

and Social Support. These concepts help begin to develop an understanding of the psychological and social impact of intermittent separation on dispersed military families.

Throughout the research, recommendations were generated to indicate what could be done to support dispersed military families. These include focussing on qualitative research methods to assess the impact of separation on military families; accurate recording of information on military families on MOD JPA system; greater inclusion of dispersed military families in military community; and greater access to information and support and raising awareness.

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Finally, I would like to express my gratitude to my parents and sister for their understanding, encouragement and copious amounts of tea and coffee! I dedicate this thesis to you.

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas, and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted through Northumbria University's Ethical Approval System on 18 May 2018 (ref: 9055).

I declare that the word count of this thesis is 64,119 words.

Name: Alison Kay Osborne

Signature:

Date: 30 November 2020

Glossary

Armed Forces

Military services responsible for the defence of the UK, overseas territories, and Crown dependencies. They also promote the UK's wider interests, support international peacekeeping, and provide humanitarian aid.

Army

An organised military force equipped for fighting on land.

Corps

A military unit or specialised branch of military, e.g., Intelligence Corps

Defence Employers Recognition Scheme (ERS)

The scheme encompasses bronze, silver, and gold awards for employer organisations that pledge, demonstrate or advocate support to defence and the armed forces community, and align their values with the Armed Forces Covenant.

Dispersal

Distribution of people over a wide area.

Dispersed Military Family

A military family that lives geographically separate from the military member of their family, not as a result of relationship separation (see also *weekending* and *married unaccompanied*).

Full-Time Reservist

A Reservist of the UK Armed Forces working full-time with varying terms of service.

Garrison

A collective term for a location with a significant military presence.

Geographic Information System (GIS)

A computer system for capturing, storing, checking, and displaying data related to positions on Earth's surface.

Joint Personnel Administration System (JPA)

An intranet - based personnel administration system used by the MOD.

Joint Service Publications (JSP)

Documents produced by the MOD detailing rules and guidelines according to MOD policy.

Married Unaccompanied

Military personnel who are stationed unaccompanied from their spouse (see also *dispersed military family* and *weekending*).

Military

A heavily armed, highly organized force primarily intended for warfare. Collectively known as Armed Forces.

Military Base

A facility directly owned and operated by or for the military that shelters military equipment and personnel and facilitates training and operations.

Military Welfare

Welfare support service provided by the UK Armed Forces. There are separate branches for Royal Navy and Royal Marines, Army and RAF.

Ministry of Defence (MOD)

UK Government department responsible for implementing defence policy set by Her Majesty's Government and overseeing the UK Armed Forces.

Officer

A member of the UK Armed Forces who holds a commission and is in a position of authority or command.

Operational Deployment

Military personnel sent on operations to various locations for war or peacekeeping missions.

Other Ranks

A member of the UK Armed Forces that do not have commission or hold a position of high command.

Posting

When military personnel are assigned to a location for their job.

Regiment

A military unit, varying in role and size depending on the country, service and/or a specialisation.

Regular

A member of the UK Armed Forces in full-time service.

Reservist

Civilians working part-time as members of the UK Armed Forces. This can also include those that have left Regular service but are recalled in times of need to return and join operations alongside Regulars.

Royal Air Force

UK aerial warfare force.

Royal Marines (RM)

UK Royal Navy's force of amphibious troops.

Royal Navy (RN)

UK's naval warfare force.

Service Family Accommodation (SFA)

Accommodation provided by the MOD to allow military personnel to live with their family close to duty station.

Squadron

A unit of personnel and equipment of varying sizes, carrying out many differing roles.

Tri-Service

Combined services of UK Armed Forces: Royal Navy and Royal Marines, British Army and RAF.

Unit

A group of a prescribed size with a specific combat or support role within a larger military organisation.

Weekending

Military personnel work away and lives separately from their family during the working week, returning home at the weekend (see also *dispersed military family* and *married unaccompanied*).

Chapter 1. Introduction

1.1. Chapter Overview

Chapter 1 introduces this PhD and explains how the PhD is linked to a wider project. Information on military families will be introduced alongside dispersed military families. In order to understand the current landscape, relevant UK Government and Ministry of Defence (MOD) initiatives are also explored. Finally, an outline of the thesis is provided and any presentations, talks and contributions to reports and inquiries from this PhD are reported.

1.2. Project Background

This PhD was funded as part of the Map of Need project, ran by the Northern Hub for Veterans and Military Families Research at Northumbria University. The Armed Forces Covenant Fund Trust commissioned the Northern Hub to produce a map of the health and social care needs of the UK Armed Forces Community (i.e., the Map of Need). The UK Armed Forces Community includes veterans, their families, serving military families and Reservists.

Utilising existing data from across the Armed Forces sector and data generated through an innovative Geographic Information System (GIS) software application, the Map of Need aims to deliver a 'Public Health Observatory' function to provide the Armed Forces Covenant Fund Trust, MOD and wider Government with information, data and intelligence on the health and social care needs of the Armed Forces Community. The information provided is intended to inform evidence-based decision making regarding the distribution of funding for services across the UK.

Existing data from the MOD's Tri-Service Families Continuous Attitudes survey over the last six years suggests that around 24% of UK military families are living geographically dispersed from the serving member of their family (MOD, 2015, 2016b, 2017, 2018d, 2019d, 2020g). With the implementation of new MOD models and policies (see section 1.4) aiming to encourage stability and increase flexibility, it is proposed that this percentage is likely to increase. Unfortunately, not enough is understood about dispersed military families' experiences, health and social needs or the potential differences and similarities with other military families. In order to determine a 'map of need' for dispersed military families, more research is required. Consequently, this PhD aims to further understand dispersed military families, allowing feedback into the Map of Need project for future research.

The research was carried out over two phases, where Phase 1 evaluated existing research and data sources. Phase 1a explored existing literature on military-induced separations. Phase 1b most closely aligns with the wider Map of Need project, using

publicly available data to determine a proxy data set for the geolocation of dispersed military families. This section particularly informs the wider research project about the availability of data and helps to ascertain a 'map of need'. Phase 2 gathered primary data through interviews with dispersed military families.

1.3. The Military Family

Traditionally, a family has been defined as a group of individuals that are connected through the bonds of marriage, blood, and adoption (Encyclopædia Britannica, 2017). Primarily, a nuclear family has been considered the oldest and most common type of family (Encyclopædia Britannica, 2017; L. R. Miller, 2016). Over time, what is considered family has broadened and it has become more widely accepted that family can include those that share social and sentimental bonds. Ultimately, family is not necessarily defined by those in the traditional definition and has become more inclusive overtime. The presence of family is often an important foundation of psychological stability (Bellou & Gerogianni, 2014).

The family has always had a significant role in the wider functioning of the military. This is especially true for Army families that have historically moved around with serving personnel, including moves around the world and to conflict zones, often termed 'following the flag' or 'camp followers' (Selous, Walker, & Misca, 2020). In the UK, this is still the case for many families that choose to move around with the serving person in accordance with their postings. Army families tend to experience whole unit moves, whereas the mobile families of those in the Royal Navy and the Royal Air Force (RAF) are more likely to experience individual moves in line with the serving person's career. This is due to the differing structures within the UK Armed Forces. Personnel in the Army join a Regiment or Corps to which they usually remain throughout their career, personnel in the Royal Navy or RAF move around as individuals based on their 'specialty'/trade.

Clever and Segal (2013) argue that military families are "*a strikingly diverse population with diverse needs*" (p. 13). Military families deal with issues common to all families such as childcare, education, parenting concerns, and career choices. However, military families are also subject to unique stressors, such as repeated relocations, foreign residence, risk of service member injury or death, frequent separations of service members from families and subsequent reorganisations of family life during reunions (Burrell, Adams, Durand, & Castro, 2006; Drummet, Coleman, & Cable, 2003). There is no standard type of military family, each have unique structures and dynamics, therefore caution should be taken in understanding their need with a one-size-fits-all approach (E. L. Weiss, Hino, Canfield, & Albright, 2017). What makes military families distinct from other families is their experiences of frequent separations, regular relocations, and safety risks (Palmer, 2008).

Separation of military family members has repeatedly been identified as a significant demand on family life and has been cited as a concern among military families. Separation can occur for a number of reasons, such as training exercises and courses, operational deployment or overseas postings. Recent lifestyle and attitude surveys with military families from the US and UK identified the amount of time away from family as a top concern, and separation in general as a top family stressor and negative aspect of military life (Blue Star Families, 2018; MOD, 2019d). Additionally, the impact of military life on family and personal life was cited as the highest factor influencing intentions to leave the military (MOD, 2019e).

The stress that military-induced separations, particularly deployments, has had on military families has been recognised in research since World War II (see Hill, 1949). However, the way in which military families desire to live their lives has changed throughout the 21st Century (Selous et al., 2020). The options now available to military families are greater, particularly as a result of changes in societal definition of what constitutes a family and the introduction of Government and MOD initiatives and policies designed to support families in their choice to remain mobile or seek stability (see 1.5 for details).

Literature considering separation in military families has predominantly focused on the impact of operational deployments on spouses and children of military service members (e.g. Mansfield et al., 2010; Riggs & Riggs, 2011; Rossetto, 2015; Thandi, Greenberg, Fear, & Jones, 2017; White, de Burgh, Fear, & Iversen, 2011) especially since 2001 and the Iraq and Afghanistan campaigns. Military deployment resonates throughout the whole family system. For example, both at-home partners and children shoulder new roles and responsibilities during a tour of duty; often while worrying about the well-being of the deployed service member and each other (Faber, Willerton, Clymer, MacDermid, & Weiss, 2008; Huebner, Mancini, Wilcox, Grass, & Grass, 2007).

In order to fully understand the extent of military families, it is important to consider population data associated with this cohort. As of April 2020, 193,980 military personnel were serving in the UK Armed Forces (MOD, 2020f). In the Tri-Service Families' Continuous Attitude Survey, it was reported that approximately 62,000 Regular trained Service personnel were married or in a civil partnership (MOD, 2020g). However, this estimate was derived from a self-reported, non-compulsory field on the Joint Personnel Administration system (JPA) and consequently may be underreported. Regardless of relationship status, each service member has a family, and many will have children.

Data from the Department of Education, MOD, Ofsted, and Charities estimated between 90,000 and 186,000 Service children live in the UK (Royal Navy and Royal Marines Children's Fund, 2009). It is probable that this figure is also underestimated owing to no

requirements for service personnel to declare children on personal military records, or to schools, and there is no verification of the number of serving Reservists and their subsequent children. Additionally, the Department of Education only collects data from state schools in England, omitting private schools; home schooling and children posted abroad (Ofsted, 2011). Furthermore, available data primarily focuses on traditional, nuclear military families. Despite the interest in military families, there is no definitive record of the number of military families.

1.4. The Dispersed Military Family

Research has explored the psychological effects of separation on military families as a result of operational deployments, however, a gap remains in research pertaining to the impact of non-deployment related separations such as living geographically dispersed (Eaton et al., 2008). As introduced in section 1.2, results from annual surveys since 2015 have indicated that a large percentage of UK military families live geographically dispersed from the military member of their family (MOD, 2015, 2016b, 2017, 2018d, 2019d, 2020g).

Family separations as a result of operational deployments are usually for an extend fixed period of time. For those living geographically dispersed, separation often occurs during the working week, with the military family member returning at the weekends. The length and duration of separation through dispersal can vary, but critically is often intermittent. There is no official definition of a dispersed military family. However, for this PhD, a dispersed military family can be characterised as *'a military family that lives geographically separate from the military member of their family, not as a result of relationship separation'*. These families primarily live in civilian communities away from military bases but can live in military housing. Other phrases that have been used to identify similarly defined families include, weekending and living married unaccompanied.

Military families may be separated or living dispersed, for a variety of different reasons including for educational stability, spousal employment, and wider family support (AFF, 2016b; RAF Families Federation, 2019a). Living as a dispersed military family may not always be seen as a choice. Some families may not be eligible for military housing, or there may be a lack of appropriate housing in the location of the serving personnel's posting. Consequently, living dispersed may be out of the families' control.

The terms separation and dispersal are used interchangeably throughout this thesis. However, separation was utilised when explaining general experiences across military families whilst dispersal was used to highlight more situation-specific experiences to

dispersed military families. Please see section 2.2 for further detail, and an overview of the literature, on dispersal.

Due to the ambiguity of the number of military families, there is limited evidence and therefore little understanding of the impact military life has on military families' lives as a whole. Existing evidence on military-induced separations has predominantly focused on the impact of operational deployments. As a consequence of this limited evidence, it is advantageous to understand what is already known about this cohort and what systems, policies and procedures may already be in place to support them.

1.5. Existing UK Initiatives

There are a number of models, policies, and strategies in place through the UK Government and the UK MOD demonstrating acknowledgement of the important role of military families. The UK Government carry out Strategic Defence and Security Reviews, instated the Armed Forces Covenant and the Armed Forces Families' Strategy 2016-2020 (see 1.5.1, 1.5.2, 1.5.3) and the MOD produced Joint Service Publications (JSP), detailing current policies and procedures. There are a multiple policies and models within the MOD that revolve around service personnel and their families: The Future Accommodation Model Pilot, Forces Help to Buy Scheme, Get You Home Travel, Flexible Service Policy, and Defence Holistic Transition Policy (see 1.5.4, 1.5.5, 1.5.6, 1.5.7, 1.5.8). All corresponding JSP documents are publicly available except for the Flexible Service Policy (see MOD, 2019c, 2020c, 2020d).

1.5.1. Strategic Defence and Security Review

In 2010 a Strategic Defence and Security Review (Cabinet Office, 2010) was carried out, this was the first substantial UK defence and security policy review since 1998. The review provided an overview of the strategic plan for the UK Armed Forces up to 2020. A great focus of the 2010 review was on the structure of the UK Armed Forces, changing the employment model and ensuring that the Armed Forces is sensitive to the needs to the defence, service personnel and their families. Consequently, the review proposed to rebuild and formalise an Armed Forces Covenant (see 1.5.2).

In acknowledgment of the impact a military lifestyle can have on families, there was also an emphasis on creating a better accommodation offer for serving personnel and their families to ensure *“greater domestic stability which is central to spouses' employment and children's education, while continuing to support mobility where this is essential to Defence requirements”* (Cabinet Office, 2010, p. 29). This was particularly prominent due to the planned withdrawal of all military personnel and their families from UK bases in Germany by 2020 and the closure of smaller UK military bases. This withdrawal was set to affect 20,000 serving personnel and their families. With this and a move towards

larger garrison communities such as Catterick Garrison in North Yorkshire and Tidworth in the South West England, a significant alteration in the distribution of military families within the UK was created (see also Rodrigues, Osborne, Johnson, & Kiernan, 2020).

In 2015, an update of this review, the National Security Strategy and Strategic Defence and Security Review (Cabinet Office, 2015) was published, reinforcing the Armed Forces Covenant and the plans for a better accommodation offer. The strategic plan set out in the 2015 review was to outline the plan for defence up to 2025. Here, the launch of the first comprehensive families' strategy for the Armed Forces was proposed (see 1.5.3). The next updated review of the UK defence and security policy is due to be published in an Integrated Review in 2021.

1.5.2. Armed Forces Covenant

Under the Armed Forces Act 2011, an enduring covenant was established between the people of the United Kingdom, Her Majesty's Government and all those who serve or have served in the Armed Forces of the crown and their families (MOD, 2016a). Introduced in 2012, the Armed Forces Covenant is "*a promise from the nation that those who serve or have served in the armed forces, and their families, are treated fairly*" (MOD, 2019b). Part of the aims of the covenant is to increase awareness of the challenges military families face and to ensure that society aims to meet them (Selous et al., 2020).

1.5.3. Armed Forces Families' Strategy 2016-2020

To further develop the commitment outlined in the Armed Forces Covenant to UK military families, the Armed Forces Families' Strategy 2016–2020 was developed (see MOD, 2016c). This strategy was designed to provide direction and guidance for the development of policy that focuses on supporting military families, with the intent to operationalise the Covenant by removing disadvantage. The priorities highlighted in the strategy include partner employment, accommodation, children's education and childcare, community support, specialist support, health and wellbeing and transition.

1.5.4. Future Accommodation Model Pilot

The MOD is running the Future Accommodation Model Pilot at three military locations (HMNB Clyde, Aldershot Garrison, and RAF Wittering) between 2019 and 2023. The aim of the Future Accommodation Model pilot is to improve the accommodation offer for service personnel, making it fairer and more flexible for military personnel and their families whilst remaining cost effective for the MOD (MOD, 2020h).

The current system bases eligibility for accommodation primarily on the rank of the service person (MOD, 2020e, 2020h). The type of property service personnel and their

families are eligible for is usually dependent on rank for officers, and for other ranks it is dependent upon family size. For those applying for Service Family Accommodation, they must be at least 18 years of age, be married or in a civil partnership or have permanent custody of children and have at least six months of service left. Recent changes have resulted in service personnel with more than four years of service and who are in an established long-term relationship (as per specific criteria) being eligible to cohabit in surplus Service Family Accommodation when available. Service Family Accommodation is usually based at the service personnel's duty base or within a set radius. Although it is possible to apply for surplus accommodation at other locations.

The intention of the Future Accommodation Model pilot is to provide a greater choice to more personnel as to where, how, and whom they live with; provide accommodation based on need rather than on rank or relationship status and enable service personnel to remain mobile while providing support for those that want greater stability for themselves and/or their family (MOD, 2020h). Further details can be found in JSP 464 Tri-Service Accommodation Regulations Volume 4: Future Accommodation Model (FAM) Pilot – UK (MOD, 2020c).

1.5.5. Forces Help to Buy Scheme

In addition to running an accommodation pilot, there is also financial support available through the Forces Help to Buy Scheme. The Forces Help to Buy Scheme aims to address the low rate of home ownership in the Armed Forces. Regular personnel who have completed the pre-requisite length of service, have more than six months of service left at time of application, and meet the right medical categories can apply to borrow up to 50% of their salary (max £25000), interest free. This is to enable service personnel to buy their first home, or to move to another property on assignment or as their family needs change (MOD, 2020b). Further details can be found in JSP 752 Tri-Service Regulations for Expenses and Allowances (see MOD, 2020d).

1.5.6. 'Get You Home Travel' Funding

Further financial support is available for service personnel living away from their family (the family home), through 'Get You Home Travel' funding. A financial contribution is provided for the cost of travel from the service personnel's duty base to a qualifying residence (same country, main family residence). This financial contribution is available for those whose main residence is more than 50 miles away from the duty base. Thus, supporting service personnel to see their family despite separation. Further details can be found in JSP 752 Tri-Service Regulations for Expenses and Allowances (see MOD, 2020d).

1.5.7. Flexible Service Policy

Flexible Service allows Regular service personnel to seek flexible working conditions. The aim of the Flexible Service policy is to transform the way in which service personnel and their families are supported and to create a modern and inclusive Armed Forces (MOD, 2020a). Service personnel can apply for part-time work, reducing work routines by 20% or 40%, and/or a restriction in separation from their home base for no more than 35 days a year (MOD, 2018a, 2020a). Those seeking flexible service can utilise this for no more than three continuous years and no more than four years total in a 12-year rolling period. Further details can be found in JSP 750 Centrally Determined Terms of Service - Chapter 1 for Flexible Working (see also MOD, 2018a).

1.5.8. Defence Holistic Transition Policy

Following the Strategy for our Veterans (MOD & Cabinet Office, 2018) presented to UK Parliament by the Secretary of State for Defence in 2018, the Defence Holistic Transition Policy was created (see MOD, 2019c). With a focus on the smooth transition to civilian life for the service personnel and their family, the transition policy ensures that support is in place throughout personnel's military service for themselves and their families long before they leave the military. Additionally, the policy aims to create a cultural shift in the way every service person considers resettlement and leaving military service, focussing on the whole person and their families, encouraging earlier preparations for civilian life (MOD, 2019c). Further details can be found in JSP 100 Defence Holistic Transition Policy, Part 1 & Part 2 Combined: Directive and Guidance (MOD, 2019c). This transition policy appears to be the first to directly consider the impact on military families, although remains focussing on the practical aspects of transition.

1.5.9. Critique of UK Initiatives

These initiatives indicate an acknowledgement, at least from the Government and MOD, of the factors that make being a military family different from other families. Specifically, the MOD policies and models deliver financial support and flexible working, providing military families with greater flexibility and stability. Additionally, with a greater focus on creating stability, the influx in the number of military families through the rebasing of military personnel and their families from overseas back to the UK as well as a greater emphasis on larger garrison communities, there has been a significant alteration in the geospatial distribution of military families in the UK (see Rodrigues et al., 2020).

However, in a Centre for Mental Health Report, it was stated that there has been no MOD led initiative to address the broad psychological well-being needs of service families. This appears absent from policy and practice with a preference for more practical aspects, such as meeting housing, education or physical healthcare needs (Fossey, 2012). No JSP appears to consider the psychological well-being of UK military

families. This is an important area to focus on as the majority of Soldiers, Sailors, Airmen, and Families Association (SSAFA) referrals relate to families and children, with 30% being in relation to stress and major life changes (as cited in Fossey, 2012). Furthermore, with the changing geospatial distribution of military families, it is important to explore the impact on psychological and social well-being of dispersed military families.

1.6. Outline of the Thesis

Chapter 1 introduces the PhD, initially providing a brief overview of the wider Map of Need project this PhD is a part of. The military family and the dispersed military family are introduced and existing UK initiatives for UK military families are considered, including Government and MOD policies and models. The contributions of this PhD are also presented.

Chapter 2 provides a review of existing evidence on military families, building a broader understanding of their experiences of separation. The paucity of literature on dispersed military families is considered alongside civilian research and literature on military children. Existing theories, the Emotional Cycle of Deployment, Ambiguous Loss and Boundary Ambiguity are also reported due to their prominence in existing literature. Finally, the rationale for the PhD research is explained.

Chapter 3 presents the methodology of the research project. The methodological considerations of mixed methods and the philosophical assumptions of such research are explored. Pragmatism as a philosophical paradigm is discussed in terms of epistemology and methodology of the PhD. Here the project design is reported.

Chapter 4 reports the research method and findings from the systematic narrative review of Phase 1a, exploring how separation impacts military families. The narrative review considers existing literature on military spouses and partners. Limitations of the literature and recommendations for future research are presented. Finally, the rationale for Phase 1a is explained.

Chapter 5 reports the research method and findings from the secondary geolocation data analysis. Three publicly available datasets are considered for the suitability to act as a proxy or the geolocation of dispersed military families. Recommendations for future data collection are discussed as well as the rationale for Phase 2.

Chapter 6 details the research method and examines findings from Phase 2, the semi-structured interviews with military family members. Five themes were generated through Framework Analysis and are reviewed with supporting quotes from participants. Outcomes and recommendations from Phase 2 were proposed.

Chapter 7 offers a discussion of the main findings Phase 1 and Phase 2 of this PhD. Six specific topics are examined as a result of the integration of findings. The strengths and limitations of the research project were discussed and an overview of recommendations for policy, practice and research were presented. A reflective passage on the research role within the research project and the original contribution to knowledge is described.

1.7. Contributions

Throughout the duration of the PhD study, I have completed oral and poster presentations as well as provided evidence to support inquiries, funding streams and reports. One paper has been published and one manuscript is in preparation for publication. See Appendix A for Professional Development and Research Training Log. The details of the contributions from this PhD are below:

1.7.1. Invited Presentations

Further Education Provision for Service Children: What the Data Tells Us (From Evidence to Action: SCiP Alliance Annual Conference, October 2018, keynote research speaker – oral presentation).

Dispersed Military Families PhD (Armed Forces Covenant Fund Trust Families in Stress Grant Holders Event, January 2019, invited informal talk to network discussion event).

Dispersed Military Families (North East Veteran's Network, February 2020, invited speaker – oral presentation).

1.7.2. Peer-Reviewed Conferences

Geographically Dispersed Military Families: Exploring the Psycho-Social Impact of Intermittent Separation (SCiP Alliance Research Symposium, July 2019, poster presentation) – see Appendix B for poster.

Geographically Dispersed Military Families: Exploring the Psycho-Social Impact of Intermittent Separation (Royal Caledonian Education Trust Practitioner's Conference: Supporting Confident Journeys, November 2019, poster presentation).

Geographically Dispersed Military Families: Exploring the Psycho-Social Impact of Intermittent Separation (British Psychological Society Defence and Security in the 21st Century Conference, November 2019, poster presentation) – see Appendix C for submitted abstract.

1.7.3. Internal Peer-Reviewed Conferences

Geographically Dispersed Military Families: Exploring the Psycho-Social Impact of Intermittent Separation – PhD Overview (Northumbria University Health and Life Sciences Postgraduate Conference, June 2018, oral presentation).

Geographically Dispersed Military Families: Exploring the Psychological and Social Impact of Intermittent Separation (Northumbria University Health and Life Sciences Early Career Researchers' Conference, June 2019, poster presentation).

1.7.4. Contribution to Government Inquiry

Armed Forces Covenant Inquiry – Dispersed Families (House of Commons Defence Committee [Armed Forces Covenant Annual Report 2018](#), January 2019, evidence contribution).

1.7.5. Evidence Contribution

Removing Barriers to Family Life: Data (Armed Forces Covenant Fund Board, September 2018, paper evidence to support '[Removing Barriers to Family Life' Funding Stream](#)).

Working Military Families – Dispersal (Home Start UK Report for Army Central Fund, March 2019, report contribution).

1.7.6. Publications

Rodrigues, M., Osborne, A. K., Johnson, D., & Kiernan, M. D. (2020). The exploration of the dispersal of British military families in England following the Strategic Defence and Security Review 2010. *Plos one*, 15(9).

Osborne, A. K. & Wilson, G. (2021). *The Impact of Military-Induced Separation on Significant Others: A Systematic Narrative Literature Review*. Manuscript in preparation.

1.8. Chapter Summary

This PhD supports ongoing research in the Map of Need project whilst providing an original contribution to knowledge. A potential gap in knowledge was identified for military families that experience military-induced separations, such as dispersal. This chapter provides an initial introduction into the importance of researching military families and the impact separation can have on their lives. Summarising current Government and MOD initiatives aimed to help provide the current 'political' context of which military families operate. Chapter 1 also provided an outline of this thesis and reported the contributions of this PhD to date.

Chapter 2. Review of Existing Literature

2.1. Chapter Overview

Chapter 2 explores existing literature pertaining to dispersed military families and the impact of separation. The review of existing evidence highlighted a gap in research on dispersed military families, therefore a rationale for a systematic narrative literature review on military-induced separation is given. Due to existing literature reviews on the impact of separation on military children, an overview of the findings from these is presented.

Civilian families of those who work in Fly-In-Fly-Out and Offshore Industries experience have similar occupation-related separations. A brief overview of civilian research on family separation is provided to aid the deeper understanding of the experiences of dispersed military families. Existing theories, the Emotional Cycle of Deployment, Ambiguous Loss and Ambiguous Presence are also considered, to provide a basic understanding of existing theory relating to separation. Finally, the rationale for this PhD research is provided.

2.2. Dispersed Military Families

Military families experience a number of military-induced separations, primarily through operational deployments. An introduction of new models and policies from the MOD as well as initiatives from the Government support military families to seek stability of their family life (see 1.5). Instead of 'following the flag', it is increasingly more accessible for families to remain living dispersed from the serving member of their family. Rodrigues et al. (2020) reported an increase in the geospatial distribution of military families in England since the 2010 Strategic Defence and Security Review (see 1.5.1). The data indicated a greater number of military families are living in locations beyond the commuting distance to military bases.

Currently, there is minimal research looking at dispersed military families, particularly in the UK. However, there have been three UK reports released that have begun to shed some light on the experiences of these families during military-induced separations (Gribble & Fear, 2019; RAF Families Federation, 2019b; Verey & Fossey, 2013). Each of these reports reflect each service of the UK Armed Forces, the Royal Navy and Royal Marines, the British Army, and the Royal Air Force.

In 2013, the Army Families Federation talked to Army wives who had recently moved out of Service Family Accommodation, bought their own home and were living married unaccompanied (Verey & Fossey, 2013). The Naval Families Federation released a report on the effect of non-operational family separations on family functioning and well-being among naval families (Gribble & Fear, 2019). This was an accumulation of data

from previous studies in addition to new data collected from naval personnel and their families. Finally, the RAF Families Federation completed a 2-year study looking at the experiences of dispersed military families through surveys and interviews with serving personnel and non-serving spouse and partners (RAF Families Federation, 2019b). In this study, dispersal was defined by living more than 10 miles away from the parent unit.

None of these reports on dispersed military families were peer-reviewed, however, the overall findings were consistent across reports. The military families lived dispersed in an attempt to gain constancy in their children's education, familial stability, home ownership, and progression of spousal careers (RAF Families Federation, 2019a; Verey & Fossey, 2013). However, the cost of stability was an impact on family relationships, where there were greater responsibilities placed on the military family at home, difficulties for the military member of the family upon reintegration and reduced family time and communication (Gribble & Fear, 2019; RAF Families Federation, 2019a). All three reports stated that the dispersed spouses and partners who had children, felt as though they were a single parent during separation (Gribble & Fear, 2019; RAF Families Federation, 2019a; Verey & Fossey, 2013). Furthermore, Gribble and Fear (2019) reported that family roles altered during separation in response to the absence of the military family member and older children took on additional responsibilities.

Support through social networks were reported to help mitigate some of the challenges caused by separation, however, these were not available to all families (Gribble & Fear, 2019; RAF Families Federation, 2019a; Verey & Fossey, 2013). Perceptions of Naval Service support was inconsistent, with some families receiving excellent support and others reporting little or no assistance (Gribble & Fear, 2019). Similar findings were reported for RAF families and many of the key welfare facilities were inaccessible for those who did not live on base (RAF Families Federation, 2019a). Confusion around who should be contacted in terms of welfare support was articulated by RAF and Naval families (Gribble & Fear, 2019; RAF Families Federation, 2019a).

The geographical location of dispersed military families meant that many did not live near the military community. A loss of identity was reported by Army spouses as a result of the separation, however this was not reported for either Naval or RAF families (Verey & Fossey, 2013). What was clear though, was problems around integrating in either military or civilian communities. All families felt excluded from military and civilian communities to a certain extent, and this caused further problems in creating support networks and accessing support services (Gribble & Fear, 2019; RAF Families Federation, 2019a; Verey & Fossey, 2013). This was supported by a report by the Royal British Legion that identified families living away from military communities were at an

increased risk of social isolation as a result of the “*weakened support from both the military and civilian communities*” (Stapleton, 2018).

The extra stress and pressure felt by dispersed military families during separation, had a negative impact on their mental health and well-being. Specific impact was found on anxiety and tiredness (Gribble & Fear, 2019). This was not described by Verey and Fossey (2013), however they did identify that dispersed Army families utilise adaptive strategies to help overcome challenges of separation. These strategies included a positive evaluation of marital relationship and autonomy.

Overall, these reports provide a good insight into the impact of separation of dispersed military families. Both qualitative and quantitative methods have been utilised, allowing for greater exploration of the findings. However, none of these papers have been peer-reviewed. Additionally, the dispersed military families in each report are defined differently and although these findings help the understanding of separation in military families, consistent conclusions or generalisation of findings cannot be made. More research is needed.

An international perspective on military families who were living voluntarily separate from the military family member (i.e. dispersed) was provided by Just-Bourgeois (2019). Similar findings were found to that of the UK research where, military families identified challenges with separation and experienced separation stressors such as being stressed, overwhelmed, lonely, and sad because of the separation. Separation was also reported to have a negative impact on mental health and well-being, specifically depression and anxiety. This was exacerbated for military families that experience prolonged separations (over 7 months). Again, social support was identified as a protective factor, mitigating the psychological impact of separation. This US literature was not directly comparable in the nature of intermittent separation but gives another perspective.

Potentially, living dispersed aligns more with the experience of families of Reserve personnel. Reservists and their families face unique challenges, particularly because they are not embedded in military communities that offer understanding and support (Blaisure, MacDermid, Saathoff-Wells, Pereira, & Dombro, 2012). However, across the board it has been found that military families can face barriers in getting the same life opportunities as their civilian counterparts (cited in Fossey, 2012). US literature on National Guard and Reserve families highlighted that these military families do not live on military bases and therefore are unable to access the same level or quality of services offered on-bases such as low cost housing, support services and wider military community (Mansfield et al., 2010). Most of these military families of Reservists are geographically isolated from other military families. Consequently, it is important to

consider research on other populations to help build a greater understanding of the impact separation can have on dispersed military families.

2.3. Systematic Narrative Review

This review of existing evidence on the impact of separation on dispersed military families has highlighted a paucity of academic, peer-reviewed research. To further understand the separation experiences of dispersed military families, it is proposed that a systematic narrative review of existing literature on the impact of military-induced separation is essential.

A systematic narrative literature review was carried out as part of the research project rather than as an aid to develop a rationale for the research. This was necessary to provide a deeper understanding of separation in military families. The systematic narrative review forms Phase 1a of the research project, the research method and findings are reported in Chapter 4.

Literature focusing on the children of military personnel were excluded from the systematic narrative review in Phase 1a. This was due to the existence of recent literature reviews that have already considered the impact of separation on military children. An overview of this literature on military children is presented in 2.4.

2.4. Military Children

It is important to consider the impact of separation on military children to aid in understanding the impact on the whole military family. The relationships between parental and youth emotional and behavioural health has been reported as reciprocal in nature, where the emotions and behaviour of one family member affects the family as a whole (Chabot, 2011; Chandra et al., 2011; P. Lester et al., 2010). Literature focusing on military children were excluded from the systematic narrative review reported in Phase 1a due to existing literature reviews that have already considered the impact of separation, or at least deployment (see Bello-Utu & DeSocio, 2015; Creech, Hadley, & Borsari, 2014; Hawkins et al., 2012; White et al., 2011). This section will therefore look to summarise these reviews and the latest literature considering the impact of military-induced separations on military children to gain a broader understanding of the impact on the whole family.

During psychosocial and cognitive development, military children develop an increased awareness and understanding of the implications of parental separation, particularly during deployments (Bello-Utu & DeSocio, 2015). Research has primarily focussed on the impact of separation at certain time points in childhood. However, findings looking at this impact, dependent on age, have been inconclusive. White et al. (2011) presented contradicting findings in their review, where some papers suggested older children may

become anxious or depressed and other papers suggested they may have more behavioural problems (see Barker & Berry, 2009; Chartrand, Frank, White, & Shope, 2008; Gorman, Eide, & Hisle-Gorman, 2010). Furthermore, Chandra, Lara-Cinisomo, et al. (2010) reported that older adolescents had greater problems with deployments and family integration than younger adolescents, potentially due to experiencing changes in family responsibilities and roles.

Numerous papers have identified an increase in aggressive behaviour and behaviour disorder diagnoses of children during parental military-induced separations, particularly those from birth to the age of five (Gorman et al., 2010; Orthner, Rose, Family, Morale, & Command, 2005). For adolescents, increases in alcohol use, binge drinking, drug use and weapon carrying have been found whilst a serving member of the family is on deployment (Acion, Ramirez, Jorge, & Arndt, 2013; Gilreath, Astor, Cederbaum, Atuel, & Benbenishty, 2014).

Although perceived behavioural problems have been linked to parental stress (Flake, Davis, Johnson, & Middleton, 2009), research has identified significantly greater child behaviour problems for those experiencing deployments independent of parent stress and coping (Chartrand et al., 2008). Due to the potential interlink with parental stress on child behaviour problems, it is important to consider the impact of separation on the family as a whole rather than just the individual components. Family members affect one another, and perceptions are affected by their own experiences. Literature has pressed the importance, in particular, of health professionals, to address the family as a unit so as to enhance the sustainability of the family ensuring *“the whole family unit will always be greater than the sum of each of the members that compose it, and that any alteration of one of its members affects the whole system”* (Ortiz, Suárez-Villa, & Expósito, 2017, p. 308)

Regardless of age, military-induced separation has also been found to have an impact on the psychological well-being of military children. For those aged six to twelve, levels of anxiety, worry and sadness are primary concerns when experiencing separation from the serving member of the family (Houston et al., 2009; P. Lester et al., 2010; Orthner et al., 2005). These children have also been found to be at a high-risk for psychological problems, internalising problems, externalising problems and attention problems (Flake et al., 2009). Research has indicated that adolescents experience increased sadness, hopelessness, suicidal ideation, depression, withdrawal, and changes in sleep and eating during parental deployment (Cederbaum et al., 2014; Huebner & Mancini, 2005).

As with child behaviour, research has established a relationship between child well-being and the mental health and coping of the non-deployed parent (Barker & Berry, 2009; Chandra, Lara-Cinisomo, et al., 2010; Creech et al., 2014; Flake et al., 2009; Hawkins

et al., 2012; P. Lester et al., 2010; Orthner et al., 2005) Interestingly, P. Lester et al. (2010) identified that levels of psychological distress of the at-home parent as well as the serving parent were predictive of anxiety, depression and externalising symptoms of the child.

A few papers have explored the impact of multiple military-induced separations on the psychological well-being of military children. These papers ascertained a decrease in children's resilience, an increase in poorer at-home parental mental health and predicted depression and internalising problems (Barker & Berry, 2009; Cederbaum et al., 2014; Chandra, Lara-Cinisomo, et al., 2010; Creech et al., 2014; Gilreath et al., 2014; Hawkins et al., 2012; P. Lester et al., 2010). Unfortunately, over time and multiple deployments, the coping mechanisms that may have been effective in maintaining good psychological well-being may become strained, giving rise to difficulties in managing the accumulated stress of the separations and subsequent reintegration (Chandra, Martin, Hawkins, & Richardson, 2010).

2.5. Civilian Families

There may be unique factors associated with military families that compound their experience of separation, but civilian research further highlights the potential impact of occupation-related separation on families. A number of civilian families frequently experience prolonged separations due to employment demands, including business trips and overseas assignments (Everson & Camp, 2011). Civilian literature has indicated that increased work demands or difficult work schedules, impact the quality of life and psychological well-being of family members (Orthner & Rose, 2009). Specifically, separation has been found to lead to increased family instability (Perry-Jenkins, Repetti, & Crouter, 2000), family role ambiguity (Zvonkovic, Solomon, Humble, & Manoogian, 2005), weaker relationships with children (Crouter, Bumpus, Head, & McHale, 2001), personal mood problems and lack of energy (Voydanoff, 2005), and feelings of lack of control over one's life (Batt & Valcour, 2003).

Occupations such as commercial fishing, long-haul trucking, fly-in fly-out work and offshore industry work are similar to the military in terms of absences from home (De Silva, Johnson, & Wade, 2011; Mederer & Barker, 2000; Ross, 2009; Zvonkovic et al., 2005). Research on the impact of separation on Fly-In Fly-Out and Offshore Industry families will be discussed (see 2.5.1, 2.5.2). The experiences of these civilian families may not be exactly the same as those of dispersed military families, however, many challenges that military families deal with are common to all families. As previously stated, military family research has prioritised the impact of operational deployments. To understand the impact of 'general' occupation-related separations such as dispersal,

considering this civilian research can be advantageous to understand the wider impact of family separations.

2.5.1. Fly-In Fly-Out Families

Fly-in fly-out work allows employers to fly employees to work at remote work sites (such as large mining regions) temporarily as an alternative to relocating the employees and their families permanently. With this long-distance travel to work, employees often live in provided accommodation during work and travel home between shifts (Gardner, Alfrey, Vandelanotte, & Rebar, 2018). Fly-In Fly-Out workers' schedules mean working away from the family home for one to four consecutive weeks at a time (De Silva et al., 2011). The inconsistent nature of the separation experienced by these families is partially comparable to that of dispersed military families. Australian research has indicated that the separation Fly-In Fly-Out families experienced has been found to affect the psychological well-being of the workers and their families (Torkington, Larkins, & Gupta, 2011).

Quantitative research from Israel and the USA suggest that Fly-in Fly-out work can also have a negative impact on relationship satisfaction of couples (Landesman & Seward, 2013). A number of challenges were identified for couples during separation including, transitioning between on-shift and off-shift roles and parenting (Whalen & Schmidt, 2016). Specifically, L. Lester, Watson, Waters, and Cross (2016) reported that depressive symptoms and emotional and behavioural difficulties in adolescent children of Fly-in Fly-out workers could be at least partially attributed to the intermittent parental absence.

Family cohesion, connectedness, flexibility and meaningful communications were reported as important factors in buffering the negative effects of Fly-In-Fly-Out work on families' well-being (L. Lester et al., 2015; Taylor & Simmonds, 2009).

2.5.2. Offshore Industry Families

Civilian research has considered the impact of offshore industry shift work on the family. As with military families, offshore industry families experience repeated separations. The work schedule of UK offshore personnel typically involves periods of two- or three-weeks work on North Sea oil and gas installations, alternating with a similar period of shore leave. To gain a greater understanding of military families during military-induced separations, it is important to consider this civilian research on offshore industry families.

Ross (2009) considered the impact of offshore industry working on the families at home. Areas of difficulty identified for the spouse at home included social isolation, lack of support in home decisions, concern for the offshore partner's safety, the uptake of work by the home spouse and child-rearing issues (Parkes, Carnell, & Farmer, 2005; Perrucci

et al., 2007). The significant and repeated adaptation on the return of the offshore partner every 2 weeks was cited as the most difficult issue (Parkes et al., 2005).

Children were reported to show differing issues dependent on age with very young children and older teenagers causing the greatest concern. Conversely, for some families, the routine absence of one parent was seen as promoting independence and resilience in the children. The experience of the families of offshore industry shift workers appears highly applicable to military families during military-induced separations. Importantly, research has reported that the anticipation of departure is worse than the actual absence, something common in any career with periodic absences (Ross, 2009).

2.6. Existing Theories

In order to understand dispersed military families' experiences of separation, it is important to consider relevant theoretical frameworks. The Emotional Cycle of Deployment and Ambiguous Loss are two of the most discussed theories in literature that aim to broaden the understanding of research surrounding military families.

2.6.1. Emotional Cycle of Deployment

The Emotional Cycle of Deployment was first discussed in the US Naval Proceedings Magazine in 1987 in an attempt to describe the changes in military families behaviour and emotions during deployments of three months or longer (see Logan, 1987). The model described the changes in behaviour and emotions during deployments greater than three months. Initially, these were presented for Navy wives but have since been utilised for all military spouses and children. The author referred to seven stages of deployment: anticipation of loss; detachments and withdrawal; emotional disorganisation; recovery and stabilisation; anticipation of homecoming; renegotiation, reintegration and stabilisation. Logan (1987) presented a model primarily characterised by feelings and although regularly cited, the more commonly known Emotional Cycle of Deployment, is a model reported by the military psychiatrists Pincus, House, Christenson, and Adler (2001).

Pincus et al. (2001), sought to describe the psychological and event-related aspects of military families' deployment experiences by developing this Emotional Cycle of Deployment. This model has since become the best-known process model to understand the experiences of separation across military deployments. Initially, this model was based on an extended deployment of six months or greater. The cycle follows five distinct stages corresponding to time points during the serving personnel deployment: pre-deployment, deployment, sustainment, re-deployment, and post-deployment (see Figure 1). Each stage of the cycle aligns to a time frame and specific emotional challenges. Any difficulty family members may experience in overcoming the

emotional challenges can lead to conflict for the whole family, including the serving member.

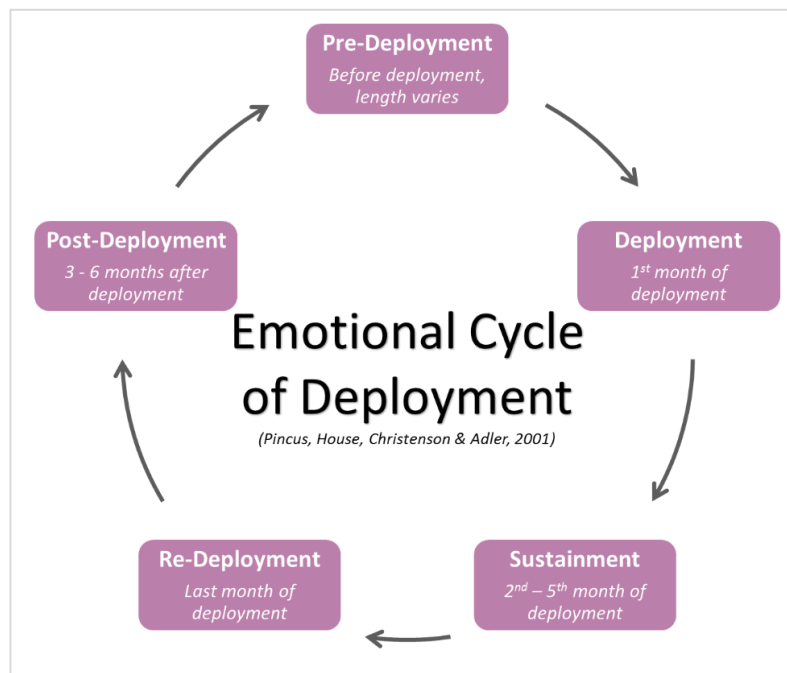


Figure 1. The Emotional Cycle of Deployment (Pincus et al., 2001).

2.6.1.1. Pre-Deployment Stage

The *Pre-Deployment* stage has a fairly flexible timeline, beginning when the family is notified of the service member's order of deployment and ending on departure. In the lead up to departure, service personnel experience an increase in training and preparation often resulting in an increased time away from the family. In addition to this, there is often an increase in discussions in the home about the upcoming deployment. Both the steadily increased separation and the increased focus on the deployment, results in the pre-deployment phase being characterised, alternatively, by denial and anticipation of loss. This phase is thought to increase a sense of emotional and physical distance between the serving member and the rest of the family.

Other experiences during the pre-deployment stage are thought to include: a focus on getting affairs in order, a desire for increased intimacy, and many voiced concerns including children's coping of separation. Any unresolved family concerns at this stage can have potentially devastating consequences, creating preoccupied service personnel that are easily distracted, and spousal distress impacting at-home routines, thus creating potentially adverse reactions in children. An inability to resolve these potential issues can create further upset at the prospect of separation.

2.6.1.2. Deployment Stage

The first month of the serving member's deployment was referred to as the *Deployment* stage. During this time, family members are thought to experience mixed emotions,

feeling disorientated, overwhelmed, a sense of relief and potential anger. Pincus et al. (2001) identified that communication can mediate these mixed emotions, facilitating a morale boost to both serving personnel and their families. Families report that the ability to stay in contact with serving personnel during deployment, particularly for key milestones such as birthdays and anniversaries, helps them to cope with the separation. However, dependent on the deployment, this communication can be infrequent and inconsistent, which in turn may cause further anxiety for families. Difficult or poor communication can further exacerbate the stress of deployment. With the military family member away from the home, new routines must be established.

2.6.1.3. *Sustainment Stage*

The *Sustainment* stage runs from the first to the fifth (or penultimate) month of deployment. During this time families establish new routines and sources of support, whether formal or informal. As challenges arise, Pincus et al. (2001) suggest that most families are able to cope with crises and more important decisions on their own, consequently leaving them to feel more confident and in control. However, over long distances and without face-to-face contact, communications between serving personnel and family members are much more vulnerable to distortion or misunderstanding. Furthermore, any difficulties in contacting family members can potentially lead to anger and resentment. Communication is key for many military families during separation. In order to cope with the fears experienced with having the serving member of their family deployed, many families argue that knowledge is the best way to fight fear (Rosenfeld, 2010).

Communication with serving personnel during separation has been found to be associated with levels of family member stress. When communication is impaired or problems occur, levels of stress that are already elevated due to the separation, as well as anxiety about each other's safety, priorities and commitment to relationships, are often exacerbated for all involved (Hinojosa, Hinojosa, & Högnäs, 2012; Maguire, Heinemann-LaFave, & Sahlstein, 2013; Moelker, Andres, Bowen, & Manigart, 2015). Furthermore, literature has indicated that the motivation of service personnel during deployment is highly correlated with the well-being of their families at home (Pittman, Kerpelman, & McFadyen, 2004; Rosen, 1995). Serving personnel worrying about the well-being of their family will struggle to concentrate and attend to tasks whilst deployed.

The impact separation can have on the children of serving personnel is individualised and dependent upon their developmental age (see Table 1 for breakdown of expected changes in behaviour and mood by age group). Any sudden negative changes in a child's behaviour or mood is a predictable response to the stress of having a deployed

parent (Pincus et al., 2001). It is also important to acknowledge that children's behaviour can be influenced and/or exacerbated by the behaviour their parent(s) are exhibiting.

Table 1. Expected changes in behaviour and mood of military children during separation by age (see Pincus et al., 2001)

| Age | Behaviour | Mood |
|---------------|-------------------------|----------------|
| 0 – 1 year | Refusal to eat | Listless |
| 1 – 3 years | Crying, tantrums | Irritable, sad |
| 3 – 6 years | Potty accidents, clingy | Irritable, sad |
| 6 – 12 years | Whinging, body aches | Irritable, sad |
| 12 – 18 years | Isolation, drug use | Anger, apathy |

2.6.1.4. *Re-Deployment Stage*

The *Re-Deployment* stage occurs during the last month of deployment, characterised by conflicting emotions. Although families may be excited for the reunion with serving personnel, nervousness around reconnection and readjustment to home-life and relationships is often present. Research has indicated that upon return from deployment, many serving personnel seek to resume their previous roles within the family and household, often leading to increased tensions where families have previously restructured due to the absence of the serving person (Drummet et al., 2003).

2.6.1.5. *Post-Deployment Stage*

Up to six months after the reunion of serving personnel with their families is the *Post-Deployment* stage of the cycle. Research has indicated that families often experience a 'honeymoon phase' followed by awkwardness and frustration after the reunion. This is often as a result of the family working to re-establish daily routines and emotional closeness to the serving personnel. There are many transitions upon reunion and many negotiations within the family unit. Spouses and partners become accustomed to one another again and often the deployed parent and the children reconcile their differences (Moelker et al., 2015).

2.6.1.6. *Critique of the Model*

It is essential that families overcome these emotional challenges at each stage of the deployment. As previously mentioned, communication can be key in helping to alleviate some of the emotional strain families can experience during separation. Comprehensive information about help or support available, details about the deployment period and other measures can minimise deployment associated stress (Moelker et al., 2015). Despite all the challenges identified throughout the deployment cycle, the majority of families cope and adjust to separation.

Lemmon and Chartrand (2009) distinguished between length of deployments and the impact of the associated stressors. Brief non-combat related deployments, with mild-to-moderate stressors, are typically well adapted to by military families whereas, longer and combat deployments with moderate to severe stressors including parental injury or death are generally only adapted to when military families receive adequate support. However, Lemmon and Chartrand (2009) acknowledge that even the separation with mild-to-moderate stressors, such as dispersal, can become severe and difficult, resulting in emotional and behavioural consequences when they are repeated and when available support is inadequate.

Numerous literature has employed the emotional cycle of deployment as the theoretical base to explore a variety of issues military families experience including emotional health consequences for military youth (Esposito-Smythers et al., 2011); family readiness (Meadows, Tanielian, et al., 2016) and developmental issues of young military children during single and multiple deployments (Barker & Berry, 2009). This research and the emotional cycle of deployment itself, considers the impact of separation but focusses on a six-month (minimum) timeline. Aligning with the typical experience of an operational deployment, this model does not consider the emotional experiences of military families going through shorter separations or the cumulative impact of multiple military-induced separations.

Peebles-Kleiger and Kleiger (1994) considered important distinctions between war-related and peacekeeping deployments regarding the emotional cycle of deployment. They argued that a war-related deployment such as the during the Gulf War, is psychologically different to a routine peacetime deployment as it was unexpected, disruptive, and hazardous. Consequently, they proposed that where wartime military families experience emotional after-shocks with potentially long-lasting effects, the final stages of a peacekeeping deployment would see a stabilisation of family life. This distinction may have implications for the use of the emotional cycle of deployment to explain separations in military dispersals. Regardless, there appears to have been minimal research into these distinctions of deployments in relation to the model (Siebler, 2003).

2.6.2. Ambiguous Loss and Boundary Ambiguity

Military-induced separations resonate throughout the whole family system. For example, both at-home partners and children shoulder new roles and responsibilities during operational deployments; often while worrying about the wellbeing of the deployed service member and each other (Faber et al., 2008; Huebner et al., 2007). However, not all families experience separations in the same way. Adaptation to stressful events is thought to be dependent upon the available 'resources' to tackle the demands on the

family (McCubbin & Patterson, 1983). More specifically “*it is the perception of the event as mediated by internal and external contexts that determines whether the family will cope or fall into crisis*” (Boss, 1987, p. 270).

An ambiguous event is defined as an event or situation that entails a loss or separation, highly relevant for military families. Ambiguous Loss is a loss that remains unclear, where there is an uncertainty and a lack of information about the person (or event). Boss’ theory of ambiguous loss goes beyond the event itself to take into account the perceptions of the event to help explain adjustment (Boss, 1987, 2002, 2004, 2007). Ambiguous loss can create feelings of hopelessness, uncertainty, and confusion that can lead to depression, guilt, anxiety, and immobilization (Boss, 2004). In the event of a possible death, ambiguity freezes the grief process, preventing cognition and blocking coping and decision-making processes (Boss, 1999). With a lack of information to clarify their loss, families end up living in a paradox of absence and presence (Boss, 2006).

For dispersed military families, it is often unclear what the outcome will be during separation and with a potential lack of communication and information from serving personnel, families can also enter into this paradox. Ambiguous loss can lead to boundary ambiguity where there is further uncertainty around which family members are part of the unit and what everyone’s role are within the family system (see Boss & Greenberg, 1984). However, it has been suggested that families whom experience periods of separation such as military families and Offshore Industry Families (see section 2.5.2), may have learned to tolerate ambiguous loss without boundary ambiguity (Boss, 2002). More research is required to further understand the experiences of military families, particularly those experiences repeated military-induced separations.

Boss’ (2002, 2004, 2006) theory of ambiguous loss models two types: ambiguous absence and ambiguous presence. *Ambiguous absence* is where the family perceives someone as being physically absent but psychologically present, such as during a military-induced separation. Here, families can become preoccupied with the absence of the military member of their family, often stretching the family boundary to psychologically retain the person whilst also reassigning their roles and responsibilities within the family (Drummet et al., 2003). *Ambiguous presence* occurs when the military family member is perceived as being present but psychologically absent. For military families this is likely to occur in the lead up to separation and upon the return and reintegration of the military family member. The psychological absence may be characterised by a preoccupation with the upcoming separation or as a result of trauma from the separation period (e.g., operational deployment) or distress from being immersed back into the family system.

Throughout military-induced separations and reunions, military families experience ambiguous absence and ambiguous presence consecutively. The extent to which they 'cope' during this time can be dependent upon how open or closed their family boundaries are. According to Hill (1949), military families that keep their boundaries partially closed (i.e. amending responsibilities whilst maintaining relationships) managed the stress of separation and reunion well. However, military families that kept their boundaries open during separation adjusted poorly. Families that closed their boundaries completely adjusted well during separation but struggled upon reunion.

In order to cope with boundary ambiguity, research has indicated that seeking information, attending support groups and talking to others in similar situations is beneficial. (Faber et al., 2008). Similar to the emotional cycle of deployment, communication appears to be key in mitigating any negative effects of military-induced separations. Similar results have been found in research on boundary ambiguity on other populations such as post-divorce step-families (Afifi & Keith, 2004), families of premature birth (Golish & Powell, 2003) and families affected by 9/11 attacks (Boss, 2004).

2.7. Rationale for the Study and Project Aims

The perceived role and identity of the military family is changing. There is an acceptance that a serving military family is not necessarily the stereotypical nuclear family where not everyone is married and/or has children. Acknowledging this shift in the nature of military families, those in committed relationships are now able to apply for Service Family Accommodation, whereas before they were not eligible. Recent strategies from the MOD such as the Future Accommodation Model and the Flexible Service Policy aim to encourage stability and increase flexibility for military families, moving away from the traditional mobile family. The 2010 Strategic Defence and Security Review presents a turning point for an increase in the number of military families living away from military bases (Rodrigues et al., 2020).

Existing data from the tri-service families' continuous attitudes survey for the last six years suggests that around 24% of families are already living geographically dispersed from the serving member of their family (MOD, 2015, 2016b, 2017, 2018d, 2019d, 2020g). Recent changes in strategies discussed above are likely to only increase this figure. However, the findings from these attitude surveys are a result of a small sample of the military families. Not enough information is known about the cohort to establish if this data represents all dispersed military families. More data is needed to ascertain the geolocation of dispersed military families. This information will aid in understanding the practical and social aspects of living geographically dispersed.

Clifton (2007) found that, in the UK, the service wife was pivotal to the whole family, if the mother was able to cope with the deployment of the serving personnel, or moving house for different postings, then the likelihood was that the children would also adapt well and be successful (see also Chandra, Lara-Cinisomo, et al., 2010; Flake et al., 2009; P. Lester et al., 2010). However, this is dependent on the psychological well-being of the non-serving parent. In the Army Families Federation (AFF) Command Brief, 79% of spouses stated that they had made either a significant or a minor compromise on the wellbeing and mental health of the non-serving family members (AFF, 2016b). This research has primarily involved quantitative surveys, with little research exploring potential explanations for the survey results. The impact of military-induced separations is felt across the whole family unit and as a result the family as a whole should be considered.

There are a number of terms that have been used to describe dispersed military families such as married unaccompanied and weekending (see Gribble & Fear, 2019; Verey & Fossey, 2013). RAF Families Federation (2019a) definition of dispersal in their report identified dispersal as living more than 10 miles from the parent unit. A combined, more explicit definition was developed for this study focussing on the separation of the military person from the family unit due to work, where they live away from the family home (see 1.4 The Dispersed Military Family for the exact definition). This was to ensure that the definition encompassed those living unaccompanied, married or in a committed relationship alongside those weekending and those with less structured separations. The focus was therefore on the separation rather than on relationship status or the nature of their separation.

Literature looking at dispersed military families has been minimal and not peer reviewed. To attempt to gain a broader understanding of the impact of military-induced separation, there is a need to rely on military research on operational deployments and civilian research on work-related family separations (e.g., offshore industry families). Research on the families of reservists should also be considered. Although the research specifically looking at dispersed families has primarily used mixed methods, the majority of the literature on deployments and work-related separations has been quantitative in nature. There is a need for more research utilising qualitative methods to understanding meaning ascribed to experience to understand the how and why, not just the prevalence.

Separation is at the centre of military life, particularly for dispersed military families. Due to the large number of military families living dispersed, and lack of research focusing on how this impacts family psychological and social well-being, this study aims to explore the psycho-social impact of intermittent separation on geographically dispersed military families. Particularly, this study aims:

1. To document policy and existing evidence on separation in military families
2. To identify a suitable proxy dataset for the geolocation of dispersed military
3. To determine the psychological impact of separation for military families living geographically dispersed
4. To explore the social impact of separation for military families living geographically dispersed

2.8. Chapter Summary

This chapter presented a review of existing evidence to begin to understand the impact of separation on military families. Minimal research on dispersed military families has been conducted, with only three UK reports having been published. Due to this gap in literature, it was proposed that a systematic narrative review of the impact of separation on military families as whole was needed. This review forms Phase 1a of the research project and is therefore presented in a later chapter (Chapter 4).

Considering other types of separation such as operational deployment and civilian work-related separations has given insight into the impact separation can have on military families, particularly their psychological well-being. Wider societal impacts, such as the role of support from family and friends during separation periods was also considered. The Emotional Cycle of Deployment, Ambiguous Loss and Boundary Ambiguity helped to explore the theoretical nuances to separation in military families and how this may be applied to dispersed military families.

Finally, the rationale for the study and project aims were presented. The overall study aim is to explore the psycho-social impact of intermittent separation on geographically dispersed military families.

Chapter 3. Methodology

3.1. Chapter Overview

Chapter 3 will explore the methodology of this PhD. Mixed methods and the philosophical assumptions underpinning this mixed methods research, specifically, Pragmatism will be discussed. The project design for this research is also reported.

3.2. Mixed Methods

In order to explore the impact of separation on dispersed military families, both qualitative and quantitative methods were considered before undertaking this study. However, due to the paucity of research in this area, neither quantitative nor qualitative methods alone were considered as being suitable to capture the impact of intermittent separation. Simply relying on either quantitative or qualitative methods alone could be restricting. When used in combination, quantitative and qualitative methods complement each other and provide a more complete picture of the research problem (Greene, Caracelli, & Graham, 1989; B. Johnson & Turner, 2003; Tashakkori, Teddlie, & Teddlie, 1998). Mixed methods research has been found to address questions that cannot be answered through quantitative or qualitative methods alone, can provide deeper insights into a phenomenon, and can facilitate the understanding of complex experiences in new ways (Creswell & Clark, 2017; Dures, Rumsey, Morris, & Gleeson, 2011).

Multiple definitions of mixed methods have been proposed, each focusing on different elements of methods, processes, purposes, and philosophy. Earlier definitions focused on the practical approach of utilising two distinct methods, one qualitative and one quantitative. As the definition developed, a greater focus was placed on the philosophy and purpose of the research in addition the methods utilised. Incorporating this, R. B. Johnson, Onwuegbuzie, and Turner (2007) suggested that “*mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approached... for the purposes of breadth and depth of understanding and corroboration*” (p. 123). Advancing this definition, Greene (2007) considered a definition that conceptualised mixed methods as a way of looking at the social world “*that actively invites [us] to participate in dialogue... multiple ways of seeing and hearing, multiple ways of making sense of the social world, and multiple stand points on what is important and to be values and cherished*” (p.20). Using various methods, and data analysis techniques, allows the researcher to explore the research aims from multiple standpoints, thus creating a richer understanding of a phenomenon researched (Dures et al., 2011).

A mixed methods approach has not only been considered in terms of using both quantitative and qualitative methods, but in terms of mixing multiple methods together

(Yin, 2006). For example, a single study combining experimentation and surveys would be an example of mixed methods research despite no qualitative method being included. What makes a research approach truly mixed as opposed to simply employing multiple methods is the integration of the findings.

Fetters and Freshwater (2015) suggested that the knowledge gained from research combining quantitative and qualitative methods is greater than the individual components – the research equivalent of the equation ' $1 + 1 = 3$ '. Thus, there is a focus on what value has been added to the research by combining methods, this would not have been the outcome if only quantitative or qualitative methods were employed (Onwuegbuzie, 2012). A single method approach may only provide half the picture of a particular phenomenon and the context of the research may be lost. Furthermore, it has been argued that using mixed methods can harness the strengths of quantitative and qualitative methods and counterbalance the weaknesses of each approach (Tariq & Woodman, 2013). However, reviews of published studies have found a lack of integration in mixed methods research, where quantitative and qualitative data was collected and reported separately (Bryman, 2006, 2007).

The rationale for utilising mixed methods in this PhD research is grounded in the fact the fact that neither quantitative nor qualitative methods are sufficient, by themselves, to capture the whole psychological and social context of separation for dispersed military families. Fully integrating the findings in a mixed method approach provides a deeper understanding of dispersed families' experiences of separation. For example, in this study, identifying a publicly available dataset as a proxy for the geolocation of dispersed military families would only provide a practical understanding of where they reside. Further understanding of how military families are impacted by their dispersal would not be attained. Alternatively, if only the qualitative research interviews were considered, it would not be clear to what extent military families lived dispersed, or where they may be located. By merging the findings together, an opportunity arises, to fully understand the context in which these families live, not only in terms of their practical displacement but in terms of how the separation affects their psychological and social well-being. A detailed picture of the lives of dispersed military families will provided a more accurate basis for any potential recommendations for policy and research as it is based on a variety of sources.

The practicality of mixed methods lies in the inevitability of researchers attempting to solve problems using both numbers and words. Morgan (2007) further explains this as combining inductive and deductive logic through abductive thinking. Despite the overwhelmingly positive outcomes of utilising mixed methods, there are some challenges that should be considered including researcher skill, time, and resources. Mixed

methods research involves collecting more data and analysing more information than either quantitative or qualitative methods alone (Creswell & Clark, 2017). This is especially true for sequential designs that may take more time and resources to complete each distinct phase of the study (Ivankova, Creswell, & Stick, 2006). Consequently, it is important to consider the time constraints within a PhD time frame.

This research aimed to go beyond just utilising multiple methods, by ensuring that the findings from each phase are amalgamated to give an overall understanding of the impact of separation on dispersed military families. Information gained through the systematic narrative review in Phase 1a can be supported or contradicted by the interview findings in Phase 2, providing greater detail. Integrating the findings on a proxy variable in Phase 1b and the findings from the interviews in Phase 2 would provide context and more detailed information on the location-specific practical aspects of dispersal, i.e., accessing support service in metropolitan versus rural areas.

3.3. Philosophical Assumptions

All research has a philosophical foundation, explaining the assumptions researchers make when gaining knowledge in their study. These philosophical assumptions shape the plan and process of the research and have been described as *worldview* or *paradigm* (Creswell & Clark, 2017; Kuhn, 2012). Philosophical assumptions in mixed methods research consist of a set of beliefs or assumptions about knowledge that informs the study (Guba & Lincoln, 2005; Creswell & Clark, 2017). Previously, quantitative and qualitative research methods have been thought of as distinct from each other, with many believing that they are incompatible due to their contradictory paradigms and philosophical differences (Creswell, 2002; DePoy & Gitlin, 2011; Greene, 2006). This has meant that, historically, a number of paradigms have been considered as the foundation of mixed methods research, each reflecting the different research approach.

When considering a paradigm continuum, *post-positivist* and *constructivist* paradigms would be anchored on two opposite ends (Betzner, 2008). On one end is post-positivism, which is often associated with quantitative methods with a focus on precision, generalisability, reliability, and replicability (Kaushik & Walsh, 2019). Post-positivist researchers view research as a series of logically related steps, based on determinism and reductionism, testing continuously refined theories (Creswell & Clark, 2017; Creswell & Poth, 2016; Yu, 2006). On the other end of the continuum, constructivism is typically associated with qualitative methods. A constructivist approach relies on the understanding of meaning formed through individuals, thus developing subjective meaning of phenomena. Participants' understanding is a consequence of meanings shaped by social interaction with others and their own personal histories. Consequently,

research is shaped from the bottom up, from individual perspectives, to broad patterns, to broad understandings (Creswell & Clark, 2017; Denzin, 2012).

It is possible to consider post-positivism as the philosophical foundation for the quantitative aspects of this study and constructivism for the qualitative, however, in order to fully integrate the findings from this mixed methods research, it is important to consider a philosophical paradigm that may reflect the foundations across the whole research, not just distinct aspects. To bridge the gap in the paradigm continuum, a prominent mixed methods philosophy has been considered: *Pragmatism*.

The word Pragmatism derives from the Greek word 'pragma', meaning action (Pansiri, 2005). Primarily based on the work of John Dewey, Pragmatism is typically associated with mixed methods research and is an overarching philosophy adopted by many mixed methods researchers (Tashakkori & Teddlie, 2003). A pragmatic approach focuses on the consequences of research and the importance of the question asked, rather than the methods used to answer the question. Thus, Pragmatism is pluralistic and oriented to 'what works' and real-world practice (Creswell & Clark, 2017; Kaushik & Walsh, 2019). The methods chosen should be the 'best fit' to carry out the research question, mixed methods should not be guided by philosophical assumptions but should focus on the outcomes (Biesta, 2010).

For this research project, the research methods chosen were led by the need to complete the overall aim: to explore the psychological and social impact of intermittent separation on dispersed military families. In order to explore both psychological and social aspects effectively, it was essential to employ a mixed methods approach. Here existing literature could be critically reviewed and the potential for a data proxy for the geolocation of dispersed military families could be explored to determine what is already known. The addition of primary qualitative research proved the first opportunity to specifically explore the experiences of dispersed military families and the integration of all these results provided a richer perspective.

At the centre of Pragmatism is the belief that human actions cannot be separated from past experiences or from the beliefs originating from such experiences. Consequently, pragmatists conclude that human thoughts are intrinsically linked to action. Broadly, Pragmatism can be defined as a philosophy in which the meaning of actions and beliefs is found in their consequences (Morgan, 2014). Actions are taken based on the possible consequences of the action; the results of such action predict the consequences of similar actions in the future. There are three other widely shared elements of Pragmatism: actions cannot be separated from the situations and contexts in which they occur; actions are linked to consequences in ways that are open to change; actions depend on worldviews that are socially shared sets of beliefs (Morgan, 2013). The

experiences dispersed military families report of separation are shaped by their beliefs from previous experiences. This may be in terms of previous experiences of separation such as operational deployments or other family dispersals.

The development of Pragmatism as a philosophical paradigm began as a consequence of the rejection of traditional assumptions about the nature of reality, knowledge and inquiry prominent in other philosophical foundations. Pragmatists rejected the notion that research can access reality solely by using a single scientific method (Maxcy, 2003). Pragmatists, such as Dewey, argue that although a reality exists apart from human experience, it can only be encountered through human experience. Consequently, all knowledge of the world is socially constructed, where some versions are more in line with individual experiences (Morgan, 2014; Yefimov, 2004). Specifically, the epistemology of Pragmatism, that all knowledge of the world is based on experience, rejects the view that knowledge is reality (Rorty & Rorty, 1999). Thus, contradicting knowledge-based paradigms such as post-positivism and constructivism which emphasise the concept of truth.

Pragmatists question whether reality can ever be truly determined (Pansiri, 2005). Reality is true as far as it aids the understanding of one's experiences (Stuhr, 1999). The truth is what has 'proven itself' and stood the scrutiny of individual use over time (Baker & Schaltegger, 2015; Ray, 2004; Stuhr, 1999). However, this does not mean that pragmatists ignore philosophical arguments and believe that 'if it works, then it is true'. Rather, there is an understanding that the broader philosophical arguments cannot be solved, because, meaning is inseparable from human experience and needs and is dependent upon context (Dillon, O'Brien, & Heilman, 2000).

Research requires a large amount of self-conscious decision-making and pragmatist researchers consequently consider potential differences of the various ways in which to design and conduct a research project (Creswell & Clark, 2017; Morgan, 2014). The perceived outcomes are invariably shaped by the prior experiences of the researchers however, for pragmatists, these can only be evaluated based on the original research question and the aims of the research project (Morgan, 2013). Pragmatism is based on the proposition that researchers use the philosophical and methodological approach that works best for the research phenomenon being investigated, thus the research question is placed above philosophical considerations (Tashakkori et al., 1998).

Methodology connects abstract philosophical issues to mechanical methods. Morgan (2007) argues pragmatists need to use "*methodology to connect issues in epistemology with issues in research design, rather than separating our thoughts about the nature of knowledge from our efforts to produce it*" (p. 68). Pragmatist researchers view the process of acquiring knowledge as a continuum rather than two opposing views of

objectivity and subjectivity such as post-positivism and constructivism (Goles & Hirschheim, 2000). Whilst deductive reasoning is characteristic of post-positivism and constructivism utilises inductive reasoning, Pragmatism embraces the two extremes, offering a flexible more reflexive approach to research design (Feilzer, 2010; Morgan, 2007; Pansiri, 2005). Again, this ensures that the research design and methodology utilised is as a result of a focus on ‘what works’ to answer the research question. Pragmatism is thus associated with abductive reasoning, moving between deduction and induction. This is essential in exploring the psycho-social impact of intermittent separation on dispersed military families as not enough is already known. The abductive approach to research allowed the constant movement between the quantitative and qualitative elements to build a greater understanding, ensuring the knowledge gained from the accumulation of phases was greater than the individual components alone.

3.4. Project Design

A mixed methods Explanatory Sequential Design (Creswell, Plano Clark, Gutmann, & Hanson, 2003) was used in this study across two phases (see Figure 2). The first phase (Phase 1a and Phase 1b) focussed on understanding what is already known about dispersed military families. Phase 1a critically evaluated existing literature on military-related separation through a systematic narrative review and Phase 1b explored existing publicly available data to determine if there was an appropriate proxy dataset for the geolocation of dispersed military families. As a result of the findings from Phase 1, Phase 2 sought to explore the psycho-social impact of intermittent separation on dispersed military families through semi-structured interviews to gain a greater understanding of their experiences.

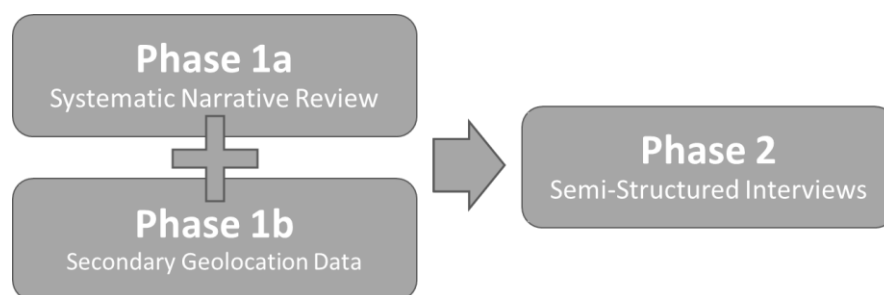


Figure 2. Explanatory Sequential Design

Traditionally, the purpose of an explanatory sequential design is to use quantitative methods in the first phase of a study to inform the qualitative second phase (Creswell et al., 2003). The quantitative results would be examined to determine what results need further exploration and what questions to ask participants in the qualitative phase (Creswell, 2014). However, the research methods chosen for Phase 1 in this study were a systematic narrative review and analysis of secondary geolocation data rather than the traditional quantitative approach. Due to the paucity of research and knowledge of the

impact of separation on dispersed military families, it was important to focus on determining what was already known about this cohort before exploring the topic further through qualitative interviews. Although this diverts from the traditional approach of an explanatory sequential design in terms of the research methods utilised, the overall aim of Phase 1 remains the same and is suited to a sequential mixed method design – to examine and determine what needs further exploration.

A case-selection variant of an explanatory sequential design was conducted here, where the research placed greater significance on the qualitative phase, instead of the initial phase of the research (also known as the Preliminary Quantitative Input Design - Creswell & Clark, 2017; Morgan, 2013). Despite an explanatory sequential design being identified as challenging to conduct, due to the time required to implement two distinct phases in a sequence, these distinct phases allowed knowledge to be built upon and explored as the research progressed (Creswell, 2014). This provided the most suitable design to explore an under-researched area such as separation in dispersed military families.

There are two alternative core mixed method designs: a Convergent Design and an Exploratory Sequential Design (Creswell, 2014). The intent of the convergent design is *“to obtain different but complementary data on the same topic”* (Morse, 1991, p. 122). Although this design provides both a quantitative and qualitative picture, contributing to multiple perspectives of a ‘problem’, it requires the same measures or assessments to be used in both qualitative and quantitative strands and for these phases to be carried out simultaneously (Creswell, 2014; Creswell & Clark, 2017). An Exploratory Sequential Design was also deemed inappropriate to answer the research question. This design focusses on studying the ‘problem’ first through qualitative data collection and analysis followed by the development of a new measure, instrument or intervention to be tested (Creswell, 2014).

In terms of exploring the impact of intermittent separation on dispersed military families, there was not enough information already available to carry out a convergent research design, or an exploratory sequential design. Therefore, there was a need for an initial phase to focus on pulling together what is already known about this cohort. This was split into two parts in which the systematic narrative review could explore the impact of separation on military families in general. Understanding this was key to building a greater understanding of dispersed military families as separation is at the centre of their experience. Although little research exists on the impact of separation on dispersed military families, a lot of research has considered the impact on military families during other military-induced separations, primarily operational deployments. The second part of Phase 1, estimating where geographically dispersed military families lived using

publicly available secondary data, also added to what was already known. However, Phase 1 did not answer the question as to the impact of intermittent separation on geographically dispersed military families, it only provided a general picture. Consequently, once Phase 1 established what was known, further qualitative exploration could be carried out with in-depth semi-structured interviews informed by these findings.

3.5. Chapter Summary

This chapter presents the methodology employed to carry out this PhD research. Mixed methods were found to be the most appropriate research approach to sufficiently carry out the research aim. In line with Pragmatism, the subsequent research design was chosen to best answer the research question. Pragmatism as a philosophical foundation, suits the views of the researcher as well as the nature of the research phenomenon being explored.

This PhD followed a mixed methods Explanatory Sequential Design with two phases. The purpose of this design was to identify what was already known about the impact of separation on military families (Phase 1) and use this to inform semi-structured interviews (Phase 2) to explore dispersed military families.

Phase 1 consisted of two parts, Phase 1a was a systematic narrative review of existing literature on the impact of separation on military families. Phase 1b considered publicly available datasets to explore the potential for a proxy for the location of dispersed military families using geospatial analysis. Once it was established what was known about the impact of separation on military families from Phase 1, this informed the semi-structured interviews in Phase 2.

Chapter 4. Phase 1a: Systematic Narrative Literature Review

4.1. Chapter Overview

Chapter 4 will report the research method and findings of the systematic narrative literature review looking at the impact of separation on military families. The review specifically considers research on spouses and partners of military personnel due to existing reviews on military children (see section 2.4 for an overview of this literature). The limitations of the literature and recommendations for future research are considered. The rationale for Phase 1b is also explored.

4.2. Method

Phase 1a involved carrying out a systematic narrative review of peer-reviewed literature and relevant grey literature looking to address the research question: 'How does separation impact military families?' A systematic narrative review strategy was used (see 4.2.1 Search Strategy).

Narrative reviews are important to determine what knowledge already exists on a particular topic. However, the drawback with narrative reviews is that the literature can be developed in an unsystematic way and is often fundamentally subjective (Borenstein, Hedges, Higgins, & Rothstein, 2011; Hodgkinson & Ford, 2014; Petticrew, 2001; Rousseau, 2012). After literature is gathered for review, the summarising of the literature may be influenced by stereotypes and biases due to the cognition and emotional constraints of the researchers (Hunter & Schmidt, 2004).

The idea of systematic reviews emerged from debates on the advantages and disadvantages of meta-analysis as an alternative to narrative reviews (Hammersley, 2001). A *"systematic review is a specific methodology that locates existing studies, selects and evaluates contributions, analyses and synthesizes data, and reports the evidence in such a way that allows reasonably clear conclusions to be reached about what is and is not known"* (Denyer & Tranfield, 2009).

In an attempt to overcome subjectivity and biases in narrative reviews, systematic reviews consider the full weight of evidence available for a specific research question which is then evaluated on a systematic basis in terms of the literature's scientific excellence (Hodgkinson & Ford, 2014). An inclusion criteria on eligibility and relevance of literature are developed before the start of the literature search (Rousseau, 2012). Systematic reviews *"differ from traditional narrative reviews by adopting a replicable, scientific and transparent process, in other words a detailed technology, that aims to minimise bias through exhaustive literature searches of published and unpublished studies and by providing an audit trail of the reviewers' decisions, procedures and conclusions"* (Tranfield, Denyer, & Smart, 2003, p.209). Additionally, systematic reviews

provide explicit, transparent methods, highlighting databases searched as well as the number of research articles retrieved and reduced in line with the inclusion and exclusion criteria set at the start, thus ensuring reproducibility by others (Collins & Fauser, 2005). Consequently, systematic reviews have become an essential tool of evidence-based policy making and practice (Hammersley, 2001; Rousseau, 2012).

A systematic narrative review was deemed the most appropriate method for the study aim since the lack of research in this area rendered it necessary to appraise evidence from multiple sources, including both quantitative and qualitative data (Popay et al., 2006). A meta-analysis is only appropriate where available literature related to the research aim is strictly quantitative (Borenstein et al., 2011), whereas, qualitative literature can be included in systematic narrative reviews. The aim of the systematic narrative review was to document existing evidence on the impact of military-induced separations on military families.

4.2.1. Search Strategy

Databases and specific journals suitable for the research aim were utilised and a systematic search was undertaken to identify published evidence relating to the study aim (Table 2). Since the Global War on Terrorism began, there has been an increase in combat deployments of military service personnel. Since 2001, a more complex form of modern warfare has developed, adapting, and modernising to become more technologically advanced. This has also resulted in a change in the nature of deployments and the role families play in the military. Deployments are not only dangerous and stressful for military personnel, but also result in a variety of problems for their spouses and families due to lengthy separations (Doyle and Peterson, 2005). Consequently, only papers published after 2001 were considered in this systematic narrative review to ensure an accurate representation of the current experiences of military families.

Research papers were considered if their sample included military families exploring the impact of separation. Papers were excluded if: not written in the English language, were about wounded injured or sick personnel, were about pregnancy or postpartum, were about veterans or transition, looked at interventions or the use/development of services, focussed on child or sibling deployment, or were about domestic violence or maltreatment (Table 2). Papers were also excluded if they were about relationship issues or problems unrelated to military separation, for example, through communication, relationship breakdown, divorce, or parental problems. Search items for the systematic narrative review were developed using the PICO framework (R. Russell et al., 2009) (Table 3).

Table 2. Search Strategy for first systematic search

| | | |
|----------------------------|--|--|
| Source | ASSIA Science Direct VFR Hub PsychARTICLES PubMed Central | Web of Science Armed Forces and Society Journal of Military, Veteran and Family Health Journal of Family Communication Military Psychology Journal |
| Search Field | Title, Abstract, Keywords | |
| Language | English only | |
| Exclusion | Non-English language Papers where participants were not military family members Papers about relationship issues/problems Papers on Wounded, Injured and Sick personnel Papers on pregnancy or postpartum Papers about veterans or transition Papers looking at interventions or the use/development of services Papers on child or sibling deployment Papers on domestic violence or maltreatment | |
| Year of publication | All papers published between 2001 and July 2018 | |

Table 3. The PICO framework to develop a search strategy used for the systematic research

| | |
|--|--|
| <u>P</u> Patient or population | 'famil*' OR, 'spouse*' OR, 'wife' OR, 'wives' OR, 'husband*' OR, 'child*' |
| <u>I</u> Intervention | 'military' OR, 'armed forces' OR, 'army' OR, 'navy' OR, 'RN' OR, 'air force' OR, 'RAF' OR, 'royal marines' OR, 'reserve*' OR, 'TA' |
| <u>C</u> Comparison (if applicable) | Not applicable |
| <u>O</u> Outcome | 'unaccompanied' OR, separate*' OR, 'disperse*' OR, 'deploy*' OR, 'weekend*' OR, '*integrate*' OR, '*engage*' |

4.2.2. Database Search

A database search was carried out following the PRISMA (2015 - Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (see Figure 3). Relevant truncation and wildcard search strategies were utilised to ensure the maximum number of relevant hits were returned. Initially, emphasis was placed on the Population and Intervention of the PICO framework. Consequently, an initial total of 6080 papers were retrieved from the database search. A further 175 papers were also included, identified through additional sources such as personal files and access to online grey literature (e.g., policy documents and reports from third sector organisations).

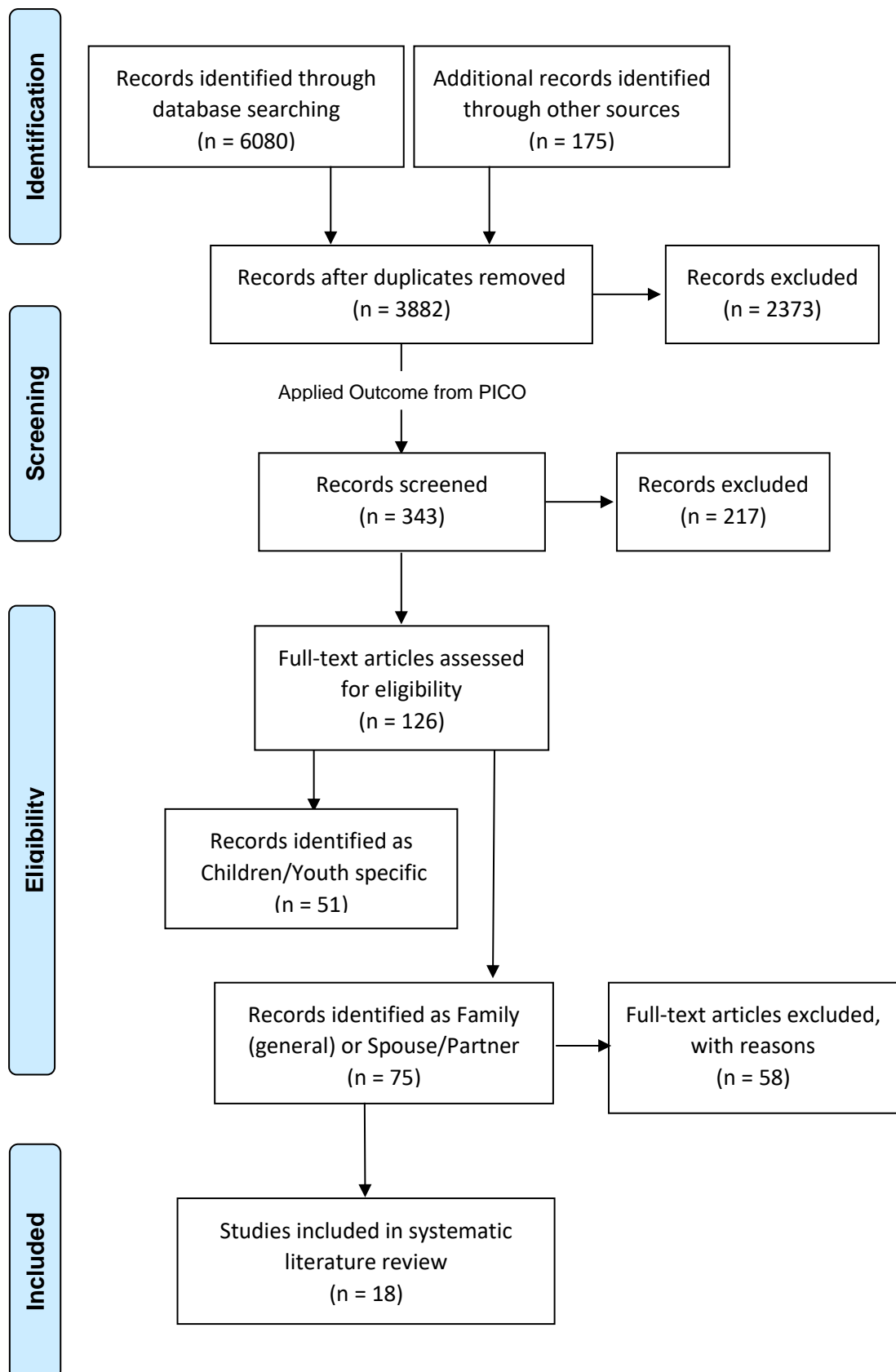


Figure 3. PRISMA diagram of papers identified during search process

Once additional sources were consulted and all duplicates removed, 3882 papers were left. At this point, papers were sifted using the Outcome measure from the PICO framework, leaving 343 papers. A further title and abstract search resulted in 126 papers

being put forward for a full-text search. As mentioned earlier, due to a number of existing literature reviews on military children, (e.g. Bello-Utu & DeSocio, 2015; Creech et al., 2014; Hawkins et al., 2012; White et al., 2011), papers focusing on children and youth were excluded from this review (n=51). A summary from these existing reviews was reported separately (see section 2.4).

Remaining papers were manually assessed for the suitability to include in the review. The Critical Appraisal Skill Programme (CASP) tool (CASP, 2018) were utilised to appraise the quality of papers included in the review. The CASP tool allowed systematic assessment of the rigor, credibility, and relevance of the published literature through ten questions. There are alternative critical appraisal tools, however, the CASP tools are succinct and cover all areas needed for the critical appraisal of evidence (Nadelson & Nadelson, 2014). Specific CASP checklists have been developed for a variety of literature including reviews of randomized controlled trials, systematic reviews, qualitative, case control, diagnostic and cohort.

Following the critical appraisal of the quality of the literature, reference and citation searches were carried out on all remaining papers; however, no further papers were included. A total of 18 papers were accepted for use in this systematic narrative review.

4.2.3. Analysis

To provide a comprehensive overview of existing literature on separation in military families, Thematic Analysis was used to analyse the papers and generate themes. The six steps of Braun and Clarke (2006) were followed: familiarisation with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report.

4.3. Findings

4.3.1. Paper Characteristics

Eighteen papers were considered for review, fifteen were peer-reviewed (see Table 4 for paper characteristics). Twelve of the papers were quantitative, four were qualitative, and two mixed methods. The majority of papers focussed on the experiences of families during deployment and over the deployment cycle. As deployment is characterised by separation, these papers were considered highly relevant.

Nine papers considered stress as an impact of military-induced separation on military spouses and partners (Andres, 2014; Burton, Farley, & Rhea, 2009; Everson, Darling, & Herzog, 2013; Marek & Moore, 2015; Oblea, Badger, & Hopkins-Chadwick, 2016; Padden, Connors, & Agazio, 2011; Skomorovsky, 2014; Van Winkle & Lipari, 2015; Warner, Appenzeller, Warner, & Grieger, 2009), five papers looked at depression (Faulk, Gloria, Cance, & Steinhardt, 2012; Meadows, Griffin, Karney, & Pollak, 2016; Oblea et

al., 2016; Skomorovsky, 2014; Warner et al., 2009) and five looked at psychological well-being (Knobloch, Basinger, Wehrman, Ebata, & McGlaughlin, 2016; K. E. Miller et al., 2018; Oblea et al., 2016; Padden et al., 2011; Stent, 2014b).

Five papers looked at the effect of separation on relationships (Andres, 2014; Dandeker, French, Birtles, & Wessely, 2006; Knobloch et al., 2016; Meadows, Tanielian, et al., 2016; Stent, 2014a), five considered the impact of support (Andres, 2014; Dandeker et al., 2006; Oblea et al., 2016; Skomorovsky, 2014; Van Winkle & Lipari, 2015) and four papers looked at the life experiences of military spouses and partners during separation (Dandeker et al., 2006; Gustavsen, 2017; Patzel, McBride, Bunting, & Anno, 2013; Verey & Fossey, 2013).

4.3.2. Participants Characteristics

Twelve papers included participants from the US (Burton et al., 2009; Everson et al., 2013; Faulk et al., 2012; Knobloch et al., 2016; Marek & Moore, 2015; Meadows, Tanielian, et al., 2016; K. E. Miller et al., 2018; Oblea et al., 2016; Padden et al., 2011; Patzel et al., 2013; Van Winkle & Lipari, 2015; Warner et al., 2009); two from the UK (Dandeker et al., 2006; Verey & Fossey, 2013); one from Canada (Skomorovsky, 2014); one from Netherlands (Andres, 2014); one from Norway (Gustavsen, 2017) and one from New Zealand (Stent, 2014a).

All papers included military family members, nine papers included spouses and partners (Andres, 2014; Everson et al., 2013; Gustavsen, 2017; Knobloch et al., 2016; Marek & Moore, 2015; Meadows, Tanielian, et al., 2016; K. E. Miller et al., 2018; Skomorovsky, 2014; Stent, 2014a) and nine papers included spouses of military personnel only (Burton et al., 2009; Dandeker et al., 2006; Faulk et al., 2012; Oblea et al., 2016; Padden et al., 2011; Patzel et al., 2013; Van Winkle & Lipari, 2015; Verey & Fossey, 2013; Warner et al., 2009). No papers focussed solely on military partners.

Spouses and partners of military personnel were male and female in eight papers (Andres, 2014; Knobloch et al., 2016; Marek & Moore, 2015; Meadows, Tanielian, et al., 2016; K. E. Miller et al., 2018; Skomorovsky, 2014; Stent, 2014a; Warner et al., 2009) and female only in ten papers (Burton et al., 2009; Dandeker et al., 2006; Everson et al., 2013; Faulk et al., 2012; Gustavsen, 2017; Oblea et al., 2016; Padden et al., 2011; Patzel et al., 2013; Van Winkle & Lipari, 2015; Verey & Fossey, 2013). No papers focussed on male spouses and partners others only.

Table 4. Characteristics of papers in review (N=18)

| Authors | Aim | Method | Sample Size | Country of Sample | Sample Gender | Sample Marriage Status |
|-----------------------------------|---|---------------|--------------------|--------------------------|----------------------|-------------------------------|
| Andres (2014) | To examine how life stress, work-family conflict, social support, psychological distress, and relationship satisfaction develop over the course of military-induced separations | Quantitative | 153 | Netherlands | Mixed | Mixed |
| Burton et al. (2009) | To compare the level of perceived stress and somatisation experience my military spouses | Quantitative | 130 | US | Female | Spouses |
| Dandeker et al. (2006) | To investigate the experiences of Army wives during a 6-month deployment period | Mixed Methods | 47 | UK | Female | Spouses |
| Everson et al. (2013) | To model the effects of parenting stress on contentment experiences | Quantitative | 200 | US | Female | Mixed |
| Faulk et al. (2012) | To explore the direct and indirect effects of perceived stress and positivity on depressive symptoms during deployment | Quantitative | 367 | US | Female | Spouses |
| Gustavsen (2017) | To examine the narratives of female spouses of Norwegian veterans of the war in Afghanistan | Qualitative | 8 | Norway | Female | Mixed |
| Knobloch et al. (2016) | To investigate how recently reunited service members and at-home partners describe their experiences during deployment and reunion | Qualitative | 118 | US | Mixed | Mixed |
| Marek and Moore (2015) | To identify how factors identified in previous research affect reintegration stress and coping during the reintegration process | Quantitative | 295 | US | Mixed | Mixed |
| Meadows, Tanielian, et al. (2016) | To determine how military families are affected by the challenges of deployment | Quantitative | 2323 | US | Mixed | Mixed |

Table 4. Continued

| Authors | Aim | Method | Sample Size | Country of Sample | Sample Gender | Sample Marriage Status |
|------------------------------|---|---------------|--------------------|--------------------------|----------------------|-------------------------------|
| K. E. Miller et al. (2018) | To investigate trajectories of sleep complaints over the course of deployment and predictors of these changes | Quantitative | 686 | US | Mixed | Mixed |
| Oblea et al. (2016) | To investigate whether a short-term separation has an adverse effect on behavioural health | Quantitative | 32 | US | Female | Spouses |
| Padden et al. (2011) | To examine the relationship between stress, coping, general well-being, and sociodemographic characteristics | Quantitative | 105 | US | Female | Spouses |
| Patzel et al. (2013) | To describe experiences of wives of National Guard soldiers that were deployed more than once | Qualitative | 9 | US | Female | Spouses |
| Skomorovsky (2014) | To examine the role of social support in the psychological; well-being of military spouses | Quantitative | 639 | Canada | Mixed | Mixed |
| Stent (2014a) | To examine the adaptations of military families across the deployment cycle | Mixed Methods | 28 | New Zealand | Mixed | Mixed |
| Van Winkle and Lipari (2015) | To examine the relationship between number of deployments and military spouses' perceived stress | Quantitative | 6470 | US | Mixed | Spouses |
| Verey and Fossey (2013) | To explore the experience of families choosing not to live in Service Family Accommodation | Qualitative | 11 | UK | Female | Spouses |
| Warner et al. (2009) | To explore the psychological effects of deployments on military families | Quantitative | 872 | US | Mixed | Spouses |

4.3.3. Themes

Six main themes were generated through thematic analysis from the papers reviewed: Stress, Depression, Psychological Well-Being, Relationships, Support and Life Experiences. Each theme is discussed below.

4.3.3.1. Stress

Nine papers considered stress (Andres, 2014; Burton et al., 2009; Everson et al., 2013; Marek & Moore, 2015; Oblea et al., 2016; Padden et al., 2011; Skomorovsky, 2014; Van Winkle & Lipari, 2015; Warner et al., 2009). Findings indicated that military spouses have high levels of perceived stress, particularly during deployment periods (Burton et al., 2009; Warner et al., 2009). Although difficult to draw a definitive conclusion, Padden et al. (2011) found that those with spouses deployed to Military Operations Other Than War had greater stress levels than those deployed to world conflict (e.g. Iraq and Afghanistan). The authors suggested this could be explained by the nature of deployment being high in frequency which may cause additional uncertainty due to their short notification and often undisclosed location. However, recruitment was based on a convenience sample of spouses at family readiness group meetings, and it is conceivable that spouses experiencing high deployment-related stress may not attend such group meetings. Family readiness group meetings are most often attended and staffed by non-commissioned officers and commissioned officers' wives, consequently underrepresenting junior enlisted spouses (Padden et al., 2011).

Despite the suggestion from Padden et al. (2011) that deployment to Military Operations Other Than War causes greater stress levels than deployment to world conflicts, Everson et al. (2013) highlights the significant impact of deployment to a world conflict (Iraq) for long periods of time. Everson et al. (2013) found 45% of 200 female military spouses scored above the clinical cut off score on the Generalised Contentment Scale (Hudson, 1982). This indicated a significant amount of discontent and problems with depression during separation with their military spouse. Of those, 14.5% had a score indicating the presence of suicidal ideation and a further 1% of scores suggesting severe or extreme distress.

Van Winkle and Lipari (2015) was the only paper to consider the impact of multiple military-induced separations on military spouses' stress levels. They ascertained a curvilinear relationship between the number of deployments and stress. As deployments initially increased, so did spouses' perceived stress levels, however, after approximately two deployments, perceived stress levels decreased. Van Winkle and Lipari (2015) suggested this may have been due to built-up resiliency and adaptation to the deployment lifestyle. However, at around four to five deployments, spouses' perceived stress levels increased, potentially reflecting a difficulty in coping with continuous and

repeated deployment cycles. Regardless of the number of deployments, Andres (2014) identified that military spouses and partners experienced the highest levels of psychological distress during separation with a significant decrease three months after deployment. The levels of psychological distress before and after separation, were found to be similar to what people generally experienced in daily life and levels of stress produced by life events were low, with no change over the course of deployment. The impact of military-induced separation on life stress should be considered with caution. Life stress was measured through 16 items adapted from Holmes and Rahe (1967) Social Readjustment Rating Scale, a restrictive scale that arguably has no items relating to military life. Thus, it can be argued that Andres (2014) did not measure life stress specific to a military population.

Furthermore, high levels of deployment related stress have been linked to psychological health and found to significantly predict depressive symptoms (Skomorovsky, 2014). However, unlike Andres (2014), Marek and Moore (2015) considered the impact of stress during the reintegration period following deployment. Regression analysis highlighted that greater family functioning and parental satisfaction were significantly related to less reintegration stress (reported by 37% of 295 partners). The better family functioning and levels of parental satisfaction were the less reintegration stress was reported. Partners reported higher reintegration stress if they were less prepared for reintegration or if they expected reintegration to be easier than it actually was. Unsurprisingly, this finding is supported by research on the emotional cycle of deployment (see Pincus et al., 2001 and section 2.6.1). Marek and Moore (2015) used a self-developed scale to determine stress in this cohort of military partners. Although the scale was found to have a strong reliability ($\alpha=.88$) for partners in the current study, the test-retest reliability in the larger US military population is unclear.

Literature appears to indicate that military-induced separation has a significant negative impact on levels of stress in military spouses and partners. However, findings from Oblea et al. (2016) suggest otherwise. Oblea et al. (2016) investigated whether short-term separations (<3 months) had an adverse effect on the behavioural health of US military spouses. No significant differences were found in pre and post separation mean scores for perceived stress, suggesting short-term separation had no effect on stress levels of military spouses. However, perceived stress was significantly positively correlated with pre and post separation depression scores. A significant negative correlation was also found between perceived stress and relationship satisfaction and resiliency in both pre and post separation questionnaires. Unfortunately, Oblea et al. (2016) only administered questionnaires to spouses of Army Officers. It is possible that officers' spouses are more able to deal with the demands of short-term separation than

other rank spouses. Research has shown higher stress levels in military spouses who were younger, less educated, unemployed and were less financially stable – characteristics literature has associated with other rank spouses (Van Winkle & Lipari, 2015).

4.3.3.2. *Depression*

Five papers looked at depression (Faulk et al., 2012; Meadows, Tanielian, et al., 2016; Oblea et al., 2016; Skomorovsky, 2014; Warner et al., 2009). Research indicated that many military spouses reported moderate to severe levels of depressive symptoms during military-induced separation with over one third of samples meeting depression criteria (Faulk et al., 2012; Warner et al., 2009). Meadows, Tanielian, et al. (2016) identified higher levels of depressive symptoms during deployment which post-deployment, returned to levels near where they were prior to deployment. Prominently, there was a consensus that there is a significant positive correlation of depressive symptoms with stress whether this be general stress, deployment stress or perceived stress during separation (Faulk et al., 2012; Oblea et al., 2016; Skomorovsky, 2014; Warner et al., 2009).

Individual experiences of the military-induced separation period must be considered when looking at the impact on depression. Skomorovsky (2014) conducted surveys with 639 spouses of Canadian Armed Forces military personnel who were currently deployed or had been deployed in the last 6 months. Deployment stress was found to significantly predict depressive symptoms, where the greater the deployment stress, the greater the depressive symptoms (positive correlation). Essentially the more difficult a separation period was for the spouses, the greater their depression score. Interestingly, Oblea et al. (2016) found no significant differences in pre and post deployment depression scores when considering a one-time short-term deployment (<3 months).

Skomorovsky (2014) reports an excellent reliability score of .93 in their sample for the 9-item Center for Epidemiologic Studies Depression Scale (Radloff, 1977), a scale to measure depressive symptoms in a general population as opposed to a clinical population. However, it is worth noting that the recall period for items on the scale was for the past week, arguably this is irrelevant for those in the sample who experienced deployment in the last 6 months. Consequently, findings from participants who were experiencing deployment at the time of the study are the only results reflective of the impact of deployment (separation) on depressive symptoms in Canadian military spouses.

Levels of depression appear to be moderated by positivity, social support from family and non-military friends, resiliency and relationship satisfaction, invoking a statistically

significant negative correlation for all (Faulk et al., 2012; Oblea et al., 2016; Skomorovsky, 2014). Faulk et al. (2012) ascertained that positivity moderated the relationship between stress and depressive symptoms, suggesting higher levels of positivity protect military spouses from developing depressive symptoms at both low and high levels of stress. Consequently, these findings support Fredrickson (1998) undoing hypothesis that positive emotions downregulate the negative effects of stress.

However, it is difficult to draw conclusions of the impact separation has on spouses and partners outside of Faulk's US cohort as only 22% of the spouses in their sample, maintained employment outside the home, suggesting 78% were unemployed. It can be argued that the sample over represents unemployed spouses with no consideration given in their findings to the impact of unemployment on depressive symptoms during deployment. The 2012 Active Duty Spouse Survey identified only 13% of military spouses in the US are unemployed (Meadows, Tanielian, et al., 2016).

It is important to note that, each paper looking at depression used a different scale to measure depressive symptoms: 20-item Center for Epidemiologic Studies Depression Scale (Radloff, 1977), 9-item Center for Epidemiologic Studies Depression Scale (Radloff, 1977), 21-item Beck Depression Inventory II Scale (Beck, Steer, & Brown, 1996), Patient Health Questionnaire-9 (Kroenke, Spitzer, & Williams, 2001) and Patient Health Questionnaire-8 (Kroenke et al., 2009). Arguably, this makes it very difficult to draw any conclusions from across the four papers in this review as there is no consistency in the method of measurement. Some measures aim to identify depressive symptoms and others focus on detecting depression. However, all measures used in these papers have been designed or adapted for use in the general population.

4.3.3.3. Psychological Well-Being

Five papers considered the psychological well-being of military spouses and partners during military-induced separation (Knobloch et al., 2016; Meadows, Tanielian, et al., 2016; K. E. Miller et al., 2018; Oblea et al., 2016; Padden et al., 2011; Stent, 2014a). These papers cover a broad range of topics that contribute to or are as a result of psychological well-being (see Ryff & Keyes, 1995 for Six Factor Model of Psychological Well-Being), including resilience, sleep functioning, autonomy and mental well-being.

Resilience in military spouses and partners has been explored in terms of how they were able to withstand adversity and adapt during military-induced separation. The ability to remain resilient is dependent upon protective factors (personal, social and familial resources) and how these can help to overcome the risk factors such as emotional distress (Kaplan, Turner, Norman, & Stillson, 1996; Kumpfer, 1999). A high degree of resilience adapting to military-induced separation was found in the spouses and partners

of military personnel where there were high levels of relationship satisfaction, family communication and satisfaction (Stent, 2014a). Despite this, Oblea et al. (2016) identified no changes in resiliency scores pre and post short-term separation. This was explained by the frequency of contact participants had, negating the effect of physical separation. However, resiliency was significantly negatively correlated with pre and post separation depression scores and post separation resiliency scores significantly influenced the levels of post separation stress.

Although no associations have been identified that would facilitate resilience, the presence of community, friends, family and military-related support was considered a resilience factor (Stent, 2014a). Additionally, participants found that knowing they had endured a significant separation gave them a sense of accomplishment and realisation of their resilience (Stent, 2014a). More research is needed on resilience, as only two papers in the review to considered this. Additionally, only female spouses of male military personnel were considered in either samples, restricting the generalisability of the findings.

K. E. Miller et al. (2018) was the only paper to consider the impact of military-induced separation on the sleep functioning of spouses and partners over the course of deployment. Latent growth analysis revealed four distinct trajectories of sleep complaints, where 61.7% of 686 spouses and partners demonstrated a resilient trajectory characterised by stable, low sleep complaints. A further 22% reported worsening of sleep complaints during deployment, suggesting a potential negative impact of separation on military spouses and partners. However, 9.8% reported improvement in sleep functioning during deployment and 6.9% had chronic sleep problems.

Although K. E. Miller et al. (2018) did not utilise a validated sleep-specific measure to determine sleep functioning over the course of deployment in this sample, they did chose two sleep-related items on the Patient Health Questionnaire Depression Scale. Acknowledged by the authors, utilising a validated measure may have allowed further exploration of sleep complaints sensitive to deployment-related stress. For example, the Pittsburgh Sleep Quality Index (Buysse, Reynolds III, Monk, Berman, & Kupfer, 1989) which has a test–retest reliability of .87 for sleep disturbances in insomnia patients (Backhaus, Junghanns, Broocks, Riemann, & Hohagen, 2002). Consideration should also be given to the benefits of using objective measures over subjective measures such as questionnaires to accurately measure sleep functioning and associated disturbances (Ibáñez, Silva, & Cauli, 2018). For example, Polysomnography, a multi-parametric test, uses biological indicators to chart sleep cycles by measuring brain waves, skeletal muscle activity, blood oxygen levels, heart rate, breathing rate and eye movements.

Introducing a qualitative aspect to the research would also increase the richness of data and understanding, allowing the exploration of reasons behind sleep functioning in spouses and partners during military-induced separations.

Padden et al. (2011) identified that the overall mental well-being of military spouses during separation was not significantly correlated with any sociodemographic variables, including rank. However, field grade officers' wives (Major, Lieutenant Colonel and Colonel or equivalents) had the highest mental well-being, whereas company grade officers' wives (Second Lieutenant, First Lieutenant and Captain or equivalents) had the lowest mental well-being. Additionally, spouses who grew up in a military family had significantly higher mental well-being than spouses who did not, suggesting that experience may play an important role in how spouses and partners are impacted by military-induced separations.

Not all literature indicated a negative effect of separation on mental well-being, personal growth as a consequence of deployment was a prominent finding (Knobloch et al., 2016). Findings indicated that deployment often prompted family members to cultivate their skills, talent and autonomy, indicating they "are stronger people mentally and physically". Knobloch et al. (2016) specifically illustrated how people grew as individuals across the deployment cycle.

4.3.3.4. Relationships

Five papers considered the impact of separation on relationships (Andres, 2014; Dandeker et al., 2006; Knobloch et al., 2016; Meadows, Tanielian, et al., 2016; Stent, 2014a). The literature suggests that relationship and marital satisfaction can decline over the course of a military-induced separation, such as deployment (Andres, 2014; Meadows, Tanielian, et al., 2016). Specifically, Meadows, Tanielian, et al. (2016) identified a decline during deployment that increased immediately post-deployment, before returning to baseline levels. Low satisfaction, before separation, was associated with low satisfaction after return (Andres, 2014).

The impact of military-induced separation on relationships appears to be consistent across populations. Although Andres (2014) looked at the impact on the spouses and partners of Dutch military personnel, whom experienced shorter 6-month deployments; these results were consistent with the finding from Meadows, Tanielian, et al. (2016) with spouses and partners of US military personnel, experiencing up to 12-month deployments. However, one paper from Dandeker et al. (2006) indicated no significant differences in participants' relationship satisfaction scores between the beginning of deployment to four to six weeks post-deployment.

Findings from Knobloch et al. (2016) aid in beginning to understand the reasons behind the identified change in satisfaction across the deployment cycle. They conducted qualitative research using open-ended questions on a questionnaire. Results indicated that it can be complicated for military couples to establish enough time and energy to rebuild connections with loved ones throughout the deployment cycle due to the separation. However, it was acknowledged that deployment could help to strengthen family bonds.

Literature has also reported that the marital relationship can be negatively affected by the serving person being in the military and that their military career can often be in conflict with family life (Dandeker et al., 2006). Interestingly, support was found to mitigate the effects of separation on relationship satisfaction, where higher levels of support during separation predicted higher levels of satisfaction (Andres, 2014). Improved relationships have also been attributed to time spent together as a family during reintegration post-deployment and to an increase in appreciation of life in general (Stent, 2014a).

In the study carried out by Stent (2014a), deployment risk was also associated with increased perceptions of relationship satisfaction. Many participants felt that deployment resulted in improved relationships. Generally, this was attributed to the time spent apart during deployment, time together on reunion, as well as an increased appreciation or a reassessment of priorities. A potential limitation of this cross-sectional research was recall bias. Participants were recalling past events surrounding a deployment and therefore findings may be skewed based upon their experience (Althubaiti, 2016). Recall bias can underestimate or overestimate the true effect of deployment on the participants. Authors acknowledged that, the retrospective nature of the study can make the temporal relationship between variables difficult to fully assess.

It is possible that the differing experiences of separation found across these papers are a result of communication. Knobloch et al. (2016) found changes in communication across the deployment cycle but did not identify any consensus in experiences. Some participants indicated more positive, open, and effective communication due to deployments whereas as others reported less frequent communication, difficulties in conversations and a negative valence of interactions. For many, military-induced separations ultimately made communicating with the service person more difficult and effortful. Positive changes in communication were cited as helping to improve relationships, foster-closer ties and strengthen commitment, thus enhancing participants' relationships. However, Knobloch et al. (2016) is the only paper in this review that specifically considered the role of communication in the impact of military-induced

separations on spouses and partners. Therefore, conclusions should be taken with caution as there are no papers in this review to support or dispute such findings.

4.3.3.5. Support

Five papers looked at the wider social support (Andres, 2014; Dandeker et al., 2006; Oblea et al., 2016; Skomorovsky, 2014; Van Winkle & Lipari, 2015). Social support underpinned much of the psychological health research, primarily as a protective factor for poor psychological health. Higher levels of social support were significantly associated with better psychological health, higher level of relationship satisfaction, fewer depressive symptoms, and lower levels of stress (Andres, 2014; Oblea et al., 2016; Skomorovsky, 2014; Van Winkle & Lipari, 2015).

Oblea et al. (2016) identified high levels of perceived social support across the deployment cycle for spouses. However, this was not reported in any other papers in this review. It is possible these findings were due to the one-off short-term (12 weeks) separation, where participants were in regular contact with the serving personnel. Despite high levels of perceived social support, this was not found to have any impact on the overall experience of separation for the military spouses.

Conversely, the rest of the literature considering wider social support, indicated a significant positive effect of support on the experiences of spouses and partners of military personnel during military-induced separations (Andres, 2014; Dandeker et al., 2006; Skomorovsky, 2014; Van Winkle & Lipari, 2015). Van Winkle and Lipari (2015) identified a significant relationship between social support and participants' perceived stress independent of the number of deployments. Additionally, it was identified that participants with children reported significantly higher levels of social support than those without children. This may be explained by greater access to support through child-focused groups and activities where parents are able to connect with others. In addition to mitigating the effects of separation on psychological health, literature indicated that higher levels of support during separation significantly predicted higher levels of relationship satisfaction after separation (Andres, 2014).

Skomorovsky (2014) identified that social support significantly predicted psychological health and depressive symptoms. Whilst four different types of social support were considered, only social support from family remained a significant predictor of psychological health and depressive symptoms when deployment and other types of social support were controlled for. Literature has supported this finding where the majority of military families sought their own family and other military families for informal support (Dandeker et al., 2006). More specifically, they sought and received the most help from other military families during and after deployment. Regardless, Skomorovsky

(2014) acknowledged that due to their cross-sectional design, it was not possible to disentangle a causal relationship between special support and psychological health. It is possible that those who are more psychologically resilient or have better psychological health may be better equipped for social networking and seeking out social support in times of need.

In addition to social support through family, the social framework provided by the military community has been found to be a benefit of military life, particularly during periods of military-induced separations (Dandeker et al., 2006). Staying within the local military community during deployment ensured better communication direct from the military. Although the military is often not chosen as the first line of support, literature has indicated that military welfare officers were a potential source of support, particularly for practical problems. Importantly, participants in Dandeker et al. (2006), argued that better telecommunication facilities for deployed military personnel was an important factor in reducing deployment-related stress and reported problems communicating with their deployed spouse due to insufficient and unreliable systems.

4.3.3.6. Life Experiences

Four papers provided a look at the life experiences of military families during military-induced separations from the perspective of UK, Norwegian and US military spouses and partners (Dandeker et al., 2006; Gustavsen, 2017; Patzel et al., 2013; Verey & Fossey, 2013). Throughout the literature, normalisation was cited as a key resource used by military spouses and partners (Gustavsen, 2017; Patzel et al., 2013). Separation as a normal experience, at least in the context of deployment, contradicts much of military family research that has primarily targeted deployment as a disruptive and stressful event (e.g. Burton et al., 2009; Warner et al., 2009). Gustavsen (2017) suggested that normalisation was used as an aid to adjust to extended separations and framed absences as part of the family story. Patzel et al. (2013) suggested more of an acceptance of the commitment participants had made to their partners' military career. Despite this normalisation and acceptance, the effort required to take care of the household and family during separation periods was not discounted. Both papers identified a dissatisfaction during separation, where some participants felt under resourced and as though they were single parents during this time (Gustavsen, 2017; Patzel et al., 2013; Verey & Fossey, 2013). Periods of separation were often exacerbated by periods of pre-deployment training, perhaps making the experience more challenging.

Patzel et al. (2013) acknowledged that experiencing multiple deployments made separations easier because of the familiarity. However, participant narratives indicated that this could also make separations more challenging due to the anticipation and dread

of repeating deployment again (Dandeker et al., 2006; Gustavsen, 2017; Patzel et al., 2013). Furthermore, pre-deployment was cited as a limbo phase before separation, due to preparation for the upcoming deployment (Gustavsen, 2017). Adaptive strategies during separation included positive evaluation of marital relationship, autonomy, and utilising informal social networks to buffer the stressors of military-induced separation.

Military spouses and partners have recognised both benefits and disadvantages of Army life. Research indicated they are accepting that a commitment to a military career also includes the work-life tensions of frequent postings, separation, lack of privacy from community living, and the non-negotiable demands of the military (Dandeker et al., 2006). In an attempt to avoid the demands of a mobile life with frequent postings, some military families live separately from the serving member of their family (i.e. a dispersed military family). Verey and Fossey (2013) is the only paper in this review to consider the impact of separation on dispersed military families. Following interviews with Army wives, the reasons for moving out a military accommodation move included a desire to gain constancy in their children's education, familial stability, financial benefits, and progression in their own careers. However, in doing so, the families made themselves vulnerable to a loss of identity as members of the military community. Living off-base, away from the military community often meant that there was a temporary absence of participants' service spouse living at home, usually during the working week. This led to some participants feeling under-resourced as though they were single parents during this time. This scenario also had erosive consequences on the family unit.

The strain on the family unit was buffered by the fact that participants recognised the choice they had made in leaving service accommodation. Participants felt excluded from the military community and reported that communication was poor, and they lacked key information during deployment. They felt that the unique stress of being military spouses was not something civilian friends could fully understand. As a consequence of both of these factors they experienced the weakened support of two vital social networks: both the military and civilian communities.

Although this is a unique paper amongst the literature considered in this review, results should be taken with caution. A high proportion of the participants were drawn from Senior Non-Commissioned Officers and Officers' families. This may be as a result of fewer junior ranks being in the housing market, but it does make it difficult to generalise the experiences of participants in the sample to the wider military community living unaccompanied. Additionally, all participants were Army spouses, the experiences of Naval and Air Force families were not considered.

All four papers considering the life experiences of military spouses and partners utilised qualitative methods. This allowed further exploration to understand the spousal

experience by giving analytical priority to their meaning-making strategies. Ultimately, these papers have helped to build an international picture of the life experiences of military families during military-induced separations. However, conclusions should be taken with caution as some cultural differences may not be comparable.

4.4. Summary of Findings

Findings from the systematic narrative review indicated that psychological well-being changes across the separation period with specific increases in the following: stress (Andres, 2014; Burton et al., 2009; Marek & Moore, 2015; Warner et al., 2009), depression (Everson et al., 2013; Faulk et al., 2012) and anxiety (Meadows, Tanielian, et al., 2016). High level of positivity was found to be a protective factor against the development of depressive symptoms at low and high levels of stress (Faulk et al., 2012). Less stress during reintegration was associated with greater family functioning and parental satisfaction. Positive aspects of deployment were also acknowledged, where deployment was credited with personal growth by military spouses and prompted family members to cultivate their skill, talent and autonomy (Knobloch et al., 2016).

Social support underpinned much of the psychological health research, primarily as a protective factor for poor psychological health (Faulk et al., 2012; Marek & Moore, 2015; Oblea et al., 2016; Skomorovsky, 2014). Most importantly, levels of social support were significantly associated with better psychological health (Skomorovsky, 2014), higher levels of relationship satisfaction (Andres, 2014), fewer depressive symptoms (Skomorovsky, 2014), and lower levels of stress (Oblea et al., 2016; Van Winkle & Lipari, 2015). Levels of relationship satisfaction appeared to be directly related to separation. Lower levels were experienced during separation, regardless of the length of time (Andres, 2014; Dandeker et al., 2006; Meadows, Griffin, et al., 2016).

Throughout all of the literature, normalisation was a key resource used by military spouses and partners, suggesting this was used as an aid to adjust to extended separations and framed absences as part of the family story (Gustavsen, 2017; Patzel et al., 2013). Despite this normalisation and acceptance, challenges experienced on a day-to-day basis during the separation period were not discounted. All papers identified a dissatisfaction during separation, with many participants feeling as though they were temporarily single parents (Gustavsen, 2017; Patzel et al., 2013; Verey & Fossey, 2013).

The impact of experiencing multiple deployments was inconclusive. Some papers reported that the familiarity of multiple deployments made separations easier, whereas other papers determined that the anticipation and dread of experiencing the separation again made the experience more challenging (Dandeker et al., 2006; Gustavsen, 2017;

Patzel et al., 2013). A positive evaluation of relationships, autonomy and utilising informal social networks were found buffer the stressors of military-induced separation.

4.5. Limitations of the Literature

Across the quantitative papers, there was little consistency in the scales used to measure the same constructs. For example across nine papers measuring stress, five papers used the 10-item Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983), one used a 14-item Perceived Stress Scale (Cohen & Williamson, 1988), one developed their own Reintegration Stress Index (Marek & Moore, 2015), one paper used one item on the Family Issues Scale (M. M. Thompson & Pasto, 2001), one used the Parental Stress Scale (Berry & Jones, 1995) and one paper used a 12-item General Health Questionnaire (Koeter & Ormel, 1991). Arguably, this makes it very difficult to draw conclusions across papers where there is no consistency in the method of measurement. Regardless of the validity of such instruments, there appears to have been an over-reliance on self-report questionnaires to assess a variety of issues in the Military population. This may be beneficial in ascertaining large volumes of data, but it can result in social desirability distortion; a tendency by participants to answer questions in a more socially desirable way than may be accurate (Richman, Kiesler, Weisband, & Drasgow, 1999). Furthermore, there was little consistency in the length and type of deployment experienced by military families.

Although many papers did, not all papers disclosed demographic information about participants that would allow for further discussion around differences in experiences based on the military personnel's rank, length of service or type of commitment. Little is known about the differences experienced within countries and little comparative research has been carried out to determine whether or not there are similar experiences of military families from different countries.

4.6. Outcomes and Recommendations from Literature Review

Some gaps have been identified in current literature as a result of this review, highlighting the need for further research. A greater focus is needed on the impact of multiple military-induced separations as well as the impact across the separation period. Additionally, the majority of the papers included in the systematic narrative review focussed on the quantitative evidence of the impact of military-induced separation, negating the explanation for such findings. Six papers conducted qualitative research (two mixed methods); future research should consider utilising qualitative methods in order to gain a greater understanding of the experiences of spouses and partners during military-induced separations.

Recommendation: Further research is needed on the impact of multiple military-induced separations on military families and a greater focus on qualitative methods to further explore the meanings and experiences of military families.

4.7. Rationale for Phase 1b

Phase 1a findings indicate that research predominantly focuses on the impact of operational deployments on spouses and partners of military service members. Little research has explored the general life experiences of military families during military-induced separation periods. Specifically, for the families of those who choose to live dispersed, for family stability. The Army Families Federation (AFF) has explored potential reasons for families living unaccompanied by personnel, with 43% of respondents citing 'to provide educational stability for my children'; 42% 'due to spousal employment' and 26% 'to have wider family support' as reasons for living unaccompanied (AFF, 2016b). Living dispersed often means living in private accommodation, not in Service Family Accommodation (SFA). In 2013, the AFF found that families moving out of SFA were vulnerable to a loss of identity as members of the community, felt excluded from the military community and reported poor communication (Verey & Fossey, 2013). Although this report gives an insight into the potential impact of military families living geographically dispersed, the focus was on Army wives. The cut off point for inclusion of papers in the systematic narrative literature review was July 2018. Since then, two more UK research projects have been reported considering dispersed Naval and RAF families (see section 2.2 Dispersed Military Families). Similar findings were reported to those found in Verey and Fossey (2013). However, none of this research is peer-reviewed and further work needs to be conducted to support research exploring the impact on tri-service families living dispersed.

Social support plays a major role in buffering negative psychological health during separation periods. The literature review identified that social support is associated with better psychological health, higher levels of relationship satisfaction, fewer depressive symptoms, and lower levels of stress (Andres, 2014; Dandeker et al., 2006; Oblea et al., 2016; Skomorovsky, 2014; Van Winkle & Lipari, 2015). To gain a better understanding of the social support structures available to dispersed military families in the UK, it is important to first determine where they are geo-located. *“Geo-visualization has the potential to provide ‘windows’ into the complexity of phenomena and processes involved”* (MacEachren & Kraak, 2001). Once the geolocation of military families is ascertained, data can then be filtered to only considered areas where there are no military personnel, thus representing families living geographically dispersed. Here, it should be possible to further explore the potential social support networks available to military families, whether this be military or civilian.

The perceived role and identity of the military family is changing with the implementation of new models and policies. The Future Accommodation Model and the Flexible Service Policy aims to encourage stability and increase flexibility for military families, moving away from the traditional mobile family. The MOD (2020g) conducted a survey with service couples where, 76% reported living together with the service member and 17% noted seeing each other weekly. This data suggests that approximately 24% of service personnel are already living geographically dispersed. This appears to be a consistent occurrence, with data pertaining to this from 2015 (see also MOD, 2015; MOD, 2016b, 2017, 2018d, 2019f). The implementation of new models and policies such as these will only increase this figure. The implications of this for military families are not certain with increased separation.

Quantitative papers included in the systematic narrative review relied on self-report measures to determine the level of psychological health and social support. As discussed earlier, there has been an over-reliance on self-report questionnaires. This may be beneficial in ascertaining large volumes of data, but it can result in self-reporting bias (Althubaiti, 2016). There are a number self-reporting biases that are prominent for consideration in relation to the quantitative papers in the review: social desirability and recall bias (Althubaiti, 2016; Richman et al., 1999). Utilising geospatial analysis negates the concern of self-reporting bias as this methodology relies on official data sets not distorted by participant recall and experience.

Phase 1b will utilise geospatial analysis to estimate where military families and in particular geographically dispersed military families reside. Firstly, a number of datasets will be considered to determine if there is a suitable proxy variable for these families. The aim is to build a better understanding of the geolocation of these families and the social support networks available to them.

4.8. Chapter Summary

This chapter presented a systematic narrative review which aimed to answer the question: what is the impact of separation on military families? A systematic search of databases was carried out using the PICO framework and following the PRISMA guidelines. As a result, 18 papers were included in the systematic narrative review.

Literature review findings indicated that military families experience changes in their psychological well-being during military-induced separations with specific increases in stress, depression, and anxiety symptoms. Communication and relationships were also affected, but social support can mitigate the psychological effects of separations. Higher levels of social support were significantly associated with better psychological health, fewer depressive symptoms, and lower levels of stress.

The systematic narrative review also highlighted the limitations in drawing inferences from the findings due to a lack of consistency of scales and measures used. The amount of qualitative literature was also minimal, making it difficult to further explore meanings ascribed to quantitative findings. However, the review did stress the importance of further research in the area of military-induced separations, beyond that of operational deployments.

Finally, the rationale for Phase 1b was presented.

Chapter 5. Phase 1b: Secondary Geolocation Data

5.1. Chapter Overview

Chapter 5 reports the method utilised to explore existing publicly available datasets to determine if there was a suitable proxy to estimate where dispersed military families reside. Multiple datasets were consulted, providing a greater understanding of what information was already known or not known about this cohort. This allowed more robust conclusions about a potential proxy dataset. The findings from the geospatial analysis of each dataset are presented separately. Findings in this chapter provide evidence for a need for more suitable data collection of military families and those who are living dispersed. Outcomes and recommendations from Phase 1b are reported as well as the rationale for Phase 2.

5.2. Method

Military families provide a significant role in the wider functioning of the military, therefore, knowing their geolocation is essential for the future planning of support services. No publicly available dataset provided intelligence on the location of military families. Any information recorded on the MOD's JPA systems was not sufficient or accurate enough to provide detailed data on the geolocation of families, especially those living dispersed. Additionally, data on JPA systems was not easily available and gaining access would be time consuming and thus costly as well as the difficulties pertaining to data protection.

Consequently, no information was available on the geolocation of dispersed military families in the UK. The lack of centralised information on the location and geospatial distribution of military families suggested the need to identify a dataset that could serve as a proxy. A proxy measurement is "*an indirect measure of the desired outcome which is itself strongly correlated to that outcome*" (The Center for Government Excellence, 2020). Government organisations have utilised proxy data to bridge the gap in information when a direct measure has been unavailable. The UK Government has utilised proxy data to explore child poverty (Department for Work and Pensions, 2020).

The aim of Phase 1b was to explore existing publicly available datasets to determine if there was a suitable proxy to estimate where dispersed military families reside. There were some restrictions to the datasets used as there was no definitive way to estimate where these families reside. As a result, the following datasets were reviewed in an attempt to derive the best estimate:

- Location of UK Regular Service and Civilian Personnel Quarterly Statistics 2017
- Census 2011: Armed Forces Household Reference Person (England and Wales)
- Service Child Pupil Premium allocation data 2017/18 (England Only)

Each dataset provided a more accurate proxy for the geospatial distribution of military families. The first dataset allowed the exploration of the whole of the UK, followed by the second, specific to England and Wales and finally the last considered England only. Proxy measures are highly advantageous in providing greater access to information in a more timely manner compared to an original measure (Mahnken et al., 2014). However, by the very definition of a proxy variable, this is an indirect measure of the phenomenon. Consequently, there are caveats to the datasets considered here which must be considered when determining the viability as a proxy.

5.2.1. Location of UK Regular Service and Civilian Personnel

The location of Regular service and civilian personnel was released quarterly until February 2018, thereafter, the statistics have been released as an annual publication (MOD, 2018b). This statistical release showed the national and international locations of all UK Regular Forces personnel and MOD civilian personnel. The location of personnel was presented at the UK local authority area level. At the time of analysis, the most recent data available was from October 2017. Only data on UK Regular military personnel was considered.

Figures were presented for all UK Regular forces personnel, however, this dataset excluded Gurkhas (soldiers native to Nepal recruited to the British Army), Full Time Reserve Service personnel and mobilised Reservists (Reservists called for permanent service to undertake military operations or other authorised military tasks). UK Regular Forces data is sourced from the MOD's JPA system, where the location data is based on the working location of the individual as recorded in the 'Assignment Location' field. Consequently, this data is based on the work location of military personnel and not their location of residence. Military personnel deployed to an area away from their work location are shown against their most recent location. Royal Navy and Royal Marines personnel on sea service are included against the local authority containing the home port of their ship. It is important to note that where personnel work, is not necessarily where they live and as a result, this data may not present an accurate proxy for the location of military families.

All data on the location of military personnel was rounded to the nearest 10, numbers ending in five were rounded to the nearest multiple of 20. Where there were five or less service personnel, data was omitted due to statistical disclosure control.

5.2.2. Census 2011: Armed Forces Household Reference Person

In the 2011 Census, a Household Reference Person was identified in each household. The concept of a Household Reference Person was introduced in the 2001 Census to replace the traditional concept of the 'head of the household'. The household reference

person acts as a single reference point for producing further derived statistics and for characterising a whole household according to characteristics of the chosen reference person (Office for National Statistics, 2014a).

In this specific data set, all household reference persons were members of the UK Armed Forces and were usual residents in the UK (Office for National Statistics, 2014b). All associated persons in households with members of the Armed Forces who were also usual residents in the UK were also included. A usual resident of the UK is anyone who, on census day (27 March 2011), was in the UK and had stayed or intended to stay in the UK for a period of 12 months or more or had a permanent UK address and was outside the UK and intended to be outside the UK for less than 12 months.

To comply with the census disclosure policy, the dataset only included local authorities that met the minimum threshold of the number of Armed Forces persons present. Unlike the location statistics of Regular personnel, this dataset was based on where military personnel lived, not where they worked. However, data is only collected and provided for England and Wales. No equivalent datasets existed for Scotland and Northern Ireland for the Armed Forces.

5.2.3. Service Child Pupil Premium

The Service Child Pupil Premium (SPP) was first introduced in April 2011 by the Department of Education as part of their commitment to delivering the Armed Forces Covenant and to acknowledge the specific challenges children from military families may face. State schools, academies and free schools in England that have military children who meet the criteria, are eligible to receive SPP funding, to provide any additional support they may require. Pupils are eligible for the SPP if they meet the following criteria (MOD, 2018c): one of their parents is serving in the UK Armed Forces (on Regular service of Full-Time Reserve Service – full commitment); they have been registered as a ‘service child’ in the school census at any point in the previous six years; one of their parents died whilst serving in the Armed Forces and the pupil receives a pension under the Armed Forces Compensation Scheme or the War Pensions Scheme.

SPP is not a part of the wider Pupil Premium offer from Government to publicly funded schools in England to improve the educational attainment of disadvantaged pupils (Department for Education, 2021). Schools receive Pupil Premium funding based on the number of pupils claiming Free School Meals or the number of looked-after and previously looked-after children.

At the time of analysis, SPP data was available for the academic years: 2011/12 to 2017/18. The publicly available data represented the number of pupils eligible for the SPP at a Parliamentary Constituency level and aggregated at local authority level - a

more detailed level than previous datasets. To ensure effective comparisons between datasets, the aggregated data at local authority level was considered in analysis. It is important to note that this data did not account for service children who were not declared, children of Reservists or full-time Reservists on home commitment and children in private schools.

Data was omitted for locations where there were less than five pupils eligible as a result of statistical disclosure control. A constant imputation approach was then applied, where the missing values are replaced with any constant numeric value depending upon the magnitude of the individual attributes (Somasundaram & Nedunchezian, 2011). The dataset reported which areas had no eligible pupils and which had five. In this case, the missing values were known to be between 1 and 4. Consequently, areas with no value were allocated a constant numeric value of 2.

In order to ensure the SPP dataset represented a proxy for military families and not the military children, the Office of National Statistics fertility rates for England and Wales in 1995 to 2013 were used to create a military family estimate. These fertility rates reflect the average number of children born to women during their productive years. All pupils eligible for SPP were aged between five and 16, in order to estimate the size of their family, an average of the fertility rates from the years in which they were born was calculated (see Table 5).

Table 5. Fertility rate years for each year of the SPP data and the average fertility rate calculated

| SPP Data Year | ONS Fertility Rate Year | ONS Fertility Rate |
|---------------|-------------------------|--------------------|
| 2011/12 | 1995-2007 | 1.73 |
| 2012/13 | 1996-2008 | 1.75 |
| 2013/14 | 1997-2009 | 1.76 |
| 2014/15 | 1998-2010 | 1.78 |
| 2015/16 | 1999-2011 | 1.79 |
| 2016/17 | 2000-2012 | 1.81 |
| 2017/18 | 2001-2013 | 1.82 |

The average fertility rate was re-calculated for each new year of the SPP data. The SPP data was then divided by the average fertility rate for each corresponding academic year and then rounded up to estimate the number of military families. Data was available for the academic years from 2011/12 to 2017/18, however for the purpose of the geospatial analysis, only data from 2017/18 was considered from this point.

$$\frac{\textit{Service Child Pupil Premium}}{\textit{Averaged ONS Fertility Rate}} = \textit{Number of military families}$$

5.2.4. Geospatial Analysis

In order to identify an appropriate dataset as a proxy for the location of military families, each dataset was imported into ESRI ArcGIS, a geographic information system mapping software. Entering data into this software resulted in the visualisation of the secondary data. A geospatial approach was taken as the most effective method to analysis this data. Each data set had hundreds of observational units and to organise this data in tables would be convoluted, difficult to manage and interpret. It was important to use geographical analysis to aid in comparing these datasets and visually determine any differences. Fairbairn (2015) note that such method provides a powerful means to depict and communicate information that has a spatial dimension.

DiBiase (1990) proposed a functional model of cartographic visualisation to direct attention to the role of maps at the early stages of scientific research. There are two parts to the model, visual thinking, and visual communication. Both of these are relevant to the analysis in this study to fully understand the geographical distribution and location of military families and dispersed military families. Visual thinking is an exploratory, cognitive process that determines data significance, produces insights on patterns, and finds relationships among geospatial data to generate questions and hypotheses about the problem under investigation (Dransch, 2000). Visual communication is when the results of visual thinking are represented in a way that can be understood (i.e., on a map). Again, following visualisations, comparisons can be made between datasets and the viability of each as a proxy variable for dispersed military families can be determined.

Alongside the distribution of data, the density (per km²) of data by local authority was calculated for all three datasets. Each local authority varies in size, for example the surface area of Portsmouth is 150.74 km² compared to Wiltshire at 8322.41 km². Due to the large variation in the surface area of local authorities across the UK, the count in each dataset was normalised by the surface area. This approach adjusted the data in each dataset and converted the information into a measure of density for each individual area, i.e., the count in each local authority was divided by the surface area of the location. Consequently, the data within each dataset was comparable across local authorities.

5.3. Findings

Each dataset was presented visually on maps with discussion around what information the data provides in this form and the feasibility of it as a proxy.

5.3.1. Location of Stationed Service Personnel: UK

In order to explore where dispersed military families reside, it was important to first identify where military families in general may live. Consequently, the location of stationed regular serving personnel was initially considered. This dataset was chosen

for consideration first due to its UK-wide coverage and the feasibility to conclude that there is likely to be a higher concentration of families living with military personnel near where they work. However, this data set does not include Gurkhas, Reservists or Full-Time Reserve Service personnel. Data on stationed personnel is available at a Local Authority level across the UK.

Service Family Accommodation is often located on or near bases/garrisons. Therefore, it was determined that the location of military personnel would serve as a good initial data set for the exploration of the geographical location of military families. The maps in Figure 4 display the geolocation of military personnel in 2017, with specific maps for England, Wales, Scotland, and Northern Ireland. Grey areas denote no stationed military personnel or a very small amount (figures are not available due to statistical disclosure control).

According to Figure 4, there are concentrations of military personnel (and their families) in the South East of England, North Yorkshire, South Wales, North West, and South West Scotland and in the Belfast area of Northern Ireland. These locations map onto the main military bases across the UK in the following local authorities: Wiltshire, Richmondshire, Portsmouth, Plymouth, Vale of Glamorgan, Argyll and Bute, Moray and Lisburn and Castlereagh (see Appendix D for tables detailing the local authorities with the greatest number of stationed military personnel and their associated density per km²).

Relying on this dataset alone would suggest military personnel and by proxy military families, live in 156 local authorities across the UK out of 346. Although Service Family Accommodation is often located on or near military bases where military personnel work, it is possible that this may be in a neighbouring local authority or the military personnel may commute to work. This data on stationed military personnel does not accurately represent where military families may reside, nor does it consider the geolocation of dispersed military families.

However, this data may be useful in later geospatial analysis to identify where there are no stationed military personnel and subsequently little or no military presence. This can help the exploration of where dispersed military families may live.

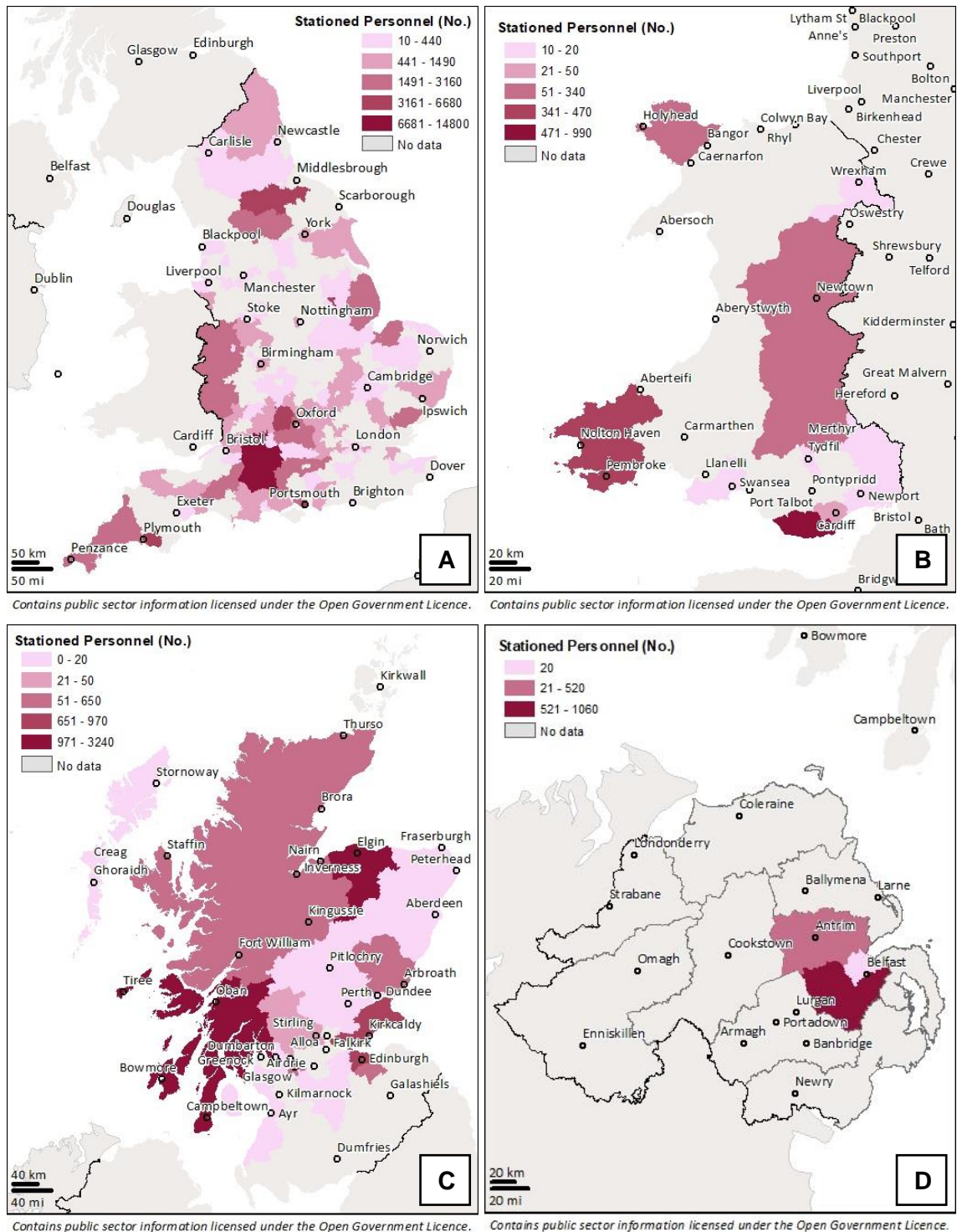


Figure 4. Location of stationed military personnel across the UK in 2017. Key: A = England, B = Wales, C = Scotland, D = Northern Ireland

5.3.2. Armed Forces Household Reference Person: England and Wales

The stationed military personnel dataset was found to be an unsuitable proxy for military families and dispersed military families. Consequently, data on the Armed Forces Household Reference Person from the 2011 Census was considered in an attempt to ascertain a more accurate representation of military families. This data only represents

households where the Household Reference Person's occupation is HM Armed Forces. Households where the military person is not the reference person are not represented.

Unlike the location statistics of stationed military personnel, this dataset is based on the location in which military personnel live, not work. Therefore, it is possible that this data represents not only military families in general but dispersed military families as well. Data was only available for local authorities in England and Wales.

The maps in Figure 5 display the geolocation of the Armed Forces Household Reference Person from the 2011 census, with specific maps for England and Wales. Grey areas denote no stationed military personnel or a very small amount (figures are not available due to statistical disclosure control).

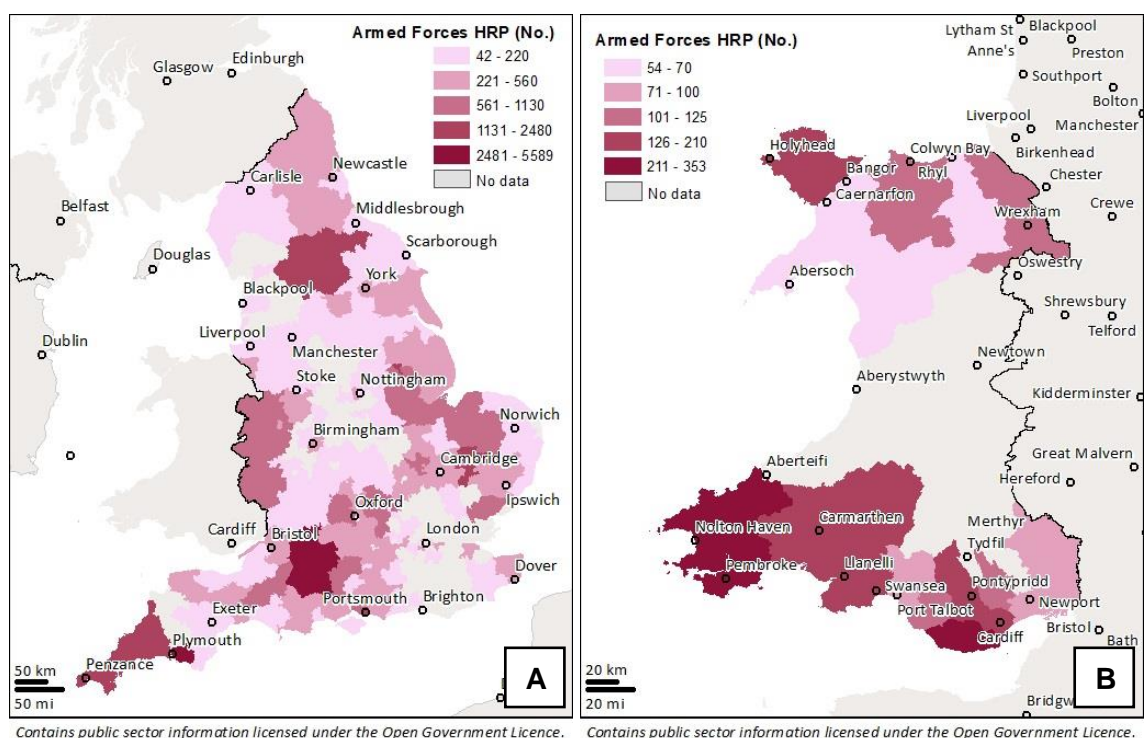


Figure 5. Location of Armed Forces Household Reference Persons in England and Wales from 2011 Census. Key: A = England, B = Wales.

Figure 5 indicates a greater dispersal of military personnel, suggesting that military personnel and by proxy military families, live in 200 local authorities across England and Wales out of 303. This is an increase of 63 local authorities in comparison to the location of stationed military personnel. Consequently, it is argued that this dataset offers a more accurate representation of where military personnel reside. By proxy, this dataset is likely to also represent military families, at least those that are mobile.

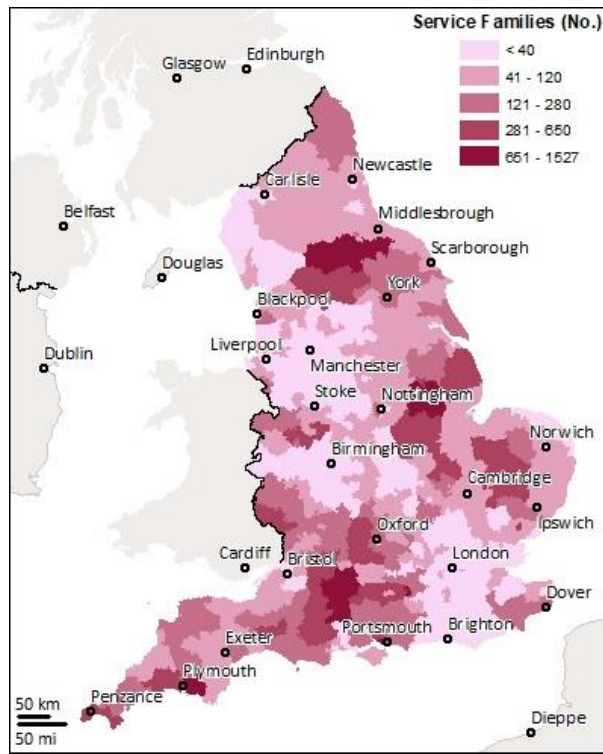
Despite the greater dispersal of data across England and Wales, this dataset presents similar concentrations of military personnel (and their families) in the South East of England, North Yorkshire, South Wales (see Appendix E for tables detailing the local

authorities with the greatest number of Armed Forces Household Reference Persons and their associated density per km²). It is unclear as to whether this dataset represents dispersed military families. A Household Reference Person was selected initially based on the economic activity (in the priority order; full-time job, part-time job, unemployed, retired, other) of the household members then by age. Although research suggests that military spouses face difficulties in finding and maintaining employment primarily due to their mobility (Lyonette, Barnes, Kispeter, Fisher, & Newell, 2018), the nature of employment for dispersed military families is unclear. Research suggests that military families become dispersed, in part, to gain stable employment and forge a career (RAF Families Federation, 2019b; Verey & Fossey, 2013). This dataset therefore probably serves as a proxy for mobile military families where the military person is more likely to be the primary earner, at least full-time. Additionally, military families living dispersed often live in their own home whilst the military person lives in Single Living Accommodation provided by the MOD. Therefore, military personnel may not even be reported under the same address as their dispersed family.

5.3.3. Service Child Pupil Premium and Fertility Rate Family Estimate

Without a seemingly accurate proxy representation of dispersed military families from data on military personnel, data on recipients of the SPP was considered. Unlike the previous datasets considered, the service pupil premium data was dependent upon the children of military personnel. This meant that the data provided considered families that lived together on 'base' as well as those that lived dispersed. However, as with the previous datasets, this data also had constraints. Families with no children, families with children younger than five or older than 16, or families of Reservists or Full Time Reserve Service (Home Commitment) were not represented. Additionally, the data was only available for England as no comparative data exists for Wales, Scotland, or Northern Ireland.

The SPP data was available at the parliamentary constituency level and aggregated at the local authority level, thus providing greater detail in localities. In order to maintain comparisons between datasets, the service pupil premium data was averaged with fertility rates to establish the numbers of families as opposed to service children as a proxy for military families. The map in Figure 6 displays the geolocation of the estimated military families from the service pupil premium data and fertility rates.



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Figure 6. Service pupil premium and fertility rates families estimate 2017/18 as a proxy for families

In comparison to the maps representing data on military personnel as a proxy for military families, Figure 6 demonstrates an even greater dispersal in the distribution of military families across England. Here only two local authorities did not have any estimate of military families. Areas where there was the greatest concentration of estimated military families were similar to those identified in earlier datasets in the South West and Yorkshire areas. However, a hotspot also emerged in the East Midlands (see Appendix F for tables detailing the local authorities with the greatest estimate of military families and their associated density per km²). Unsurprisingly, these hotspots were in areas where major military facilities are located, fitting with the knowledge that the majority of military families live in service family accommodation on or near the base where the military member of their family works.

To identify a proxy for the geolocation of dispersed military families, this dataset provides the first promise of success. This SPP estimate represents all military families of Regular military personnel, regardless of their residing status. Therefore, it is possible to potentially isolate proxy data for dispersed military families.

5.3.4. Dispersed Military Families

In order to estimate the dispersed military family population in England, the SPP family estimate, at the local authority level, was considered in relation to the location of stationed personnel dataset. Table 6 shows an estimate of around 45252 military

families with dependent children in England in 2017. Among the 45254 military families, 10045 (22.20%) were in local authorities with no stationed military personnel.

Table 6. Estimated number of military families based on number of service personnel in LAs

| Military Personnel by Local Authority | Estimated Number of Military Families | % of England Total |
|---------------------------------------|---------------------------------------|--------------------|
| ≤ 5 | 10045 | 22.20 |
| 10 – 100 | 4135 | 9.14 |
| 110 – 1000 | 8178 | 18.07 |
| 1010 – 2000 | 10024 | 22.15 |
| ≥ 2010 | 12872 | 28.44 |
| Total | 45254 | 100 |

To determine if this data set could also be used to estimate where families may be living geographically dispersed, data was isolated for local authority areas where there were no military personnel but an estimate of military families (see Figure 7).

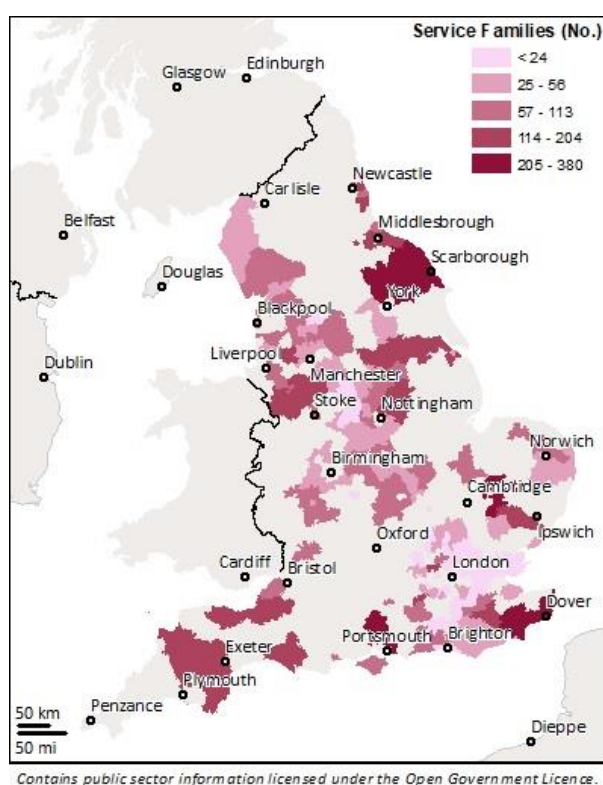


Figure 7. Location estimate of dispersed military families in England 2017/18

Within the isolated dataset displayed in Figure 7, the map indicates that the estimated dispersed military families' population is, in itself, quite dispersed across England. To further understand which areas may be of greatest interest, the top 20 local authorities with the greatest estimate of dispersed military families are reported in Table 7. In addition to the number of estimated dispersed military families, the associated density

per km² of these families in each local authority and the percentage of the England total estimate is also reported.

Table 7. Top 20 local authorities with the greatest estimate of military families and no military personnel

| Local Authority | Number of Families | % of England Total | Density per Km ² (#Rank) ^a |
|----------------------|--------------------|--------------------|--|
| Ashford | 380 | 0.84 | <1 (#38) |
| Havant | 332 | 0.73 | <1 (#20) |
| Forest Heath | 328 | 0.72 | <1 (#42) |
| Eastleigh | 287 | 0.63 | <1 (#19) |
| Scarborough | 264 | 0.58 | <1 (#127) |
| Dover | 262 | 0.58 | <1 (#18) |
| West Dorset | 204 | 0.45 | <1 (#71) |
| Darlington | 188 | 0.42 | 3 (#1) |
| North Lincolnshire | 181 | 0.40 | <1 (#99) |
| Tunbridge Wells | 166 | 0.37 | <1 (#46) |
| North Tyneside | 166 | 0.37 | 1 (#4) |
| Newark and Sherwood | 165 | 0.36 | <1 (#91) |
| Babergh | 162 | 0.36 | <1 (#62) |
| Stockton-on-Tees | 158 | 0.35 | <1 (#21) |
| Doncaster | 158 | 0.35 | <1 (#57) |
| Sunderland | 153 | 0.34 | <1 (#12) |
| Harrow | 148 | 0.33 | 1 (#5) |
| Redcar and Cleveland | 147 | 0.32 | <1 (#32) |
| Torbay | 143 | 0.32 | <1 (#65) |
| Wigan | 140 | 0.31 | <1 (#28) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person. Note: highlighted rows show the local authorities that are in the top 20 for the greatest number of estimated dispersed military families and top 20 for greatest density of estimated dispersed military families per km²

Some of the local authorities in Table 7 are near major military populations or cover sites of service family accommodation such as, Havant, Eastleigh, and Darlington. However, overall, the data would suggest that these were the top areas where military families lived in private rented accommodation, or where families have purchased their own properties and live dispersed. Consequently, it can be surmised that this map tentatively shows local authorities where dispersed military families are likely to reside.

Interestingly, five local authorities fell into the top 20 for the number and density of estimated dispersed military families. As highlighted before, areas such as Harrow, Eastleigh and Darlington are local authorities where there is service family accommodation or are near major military populations. However, North Tyneside and Sunderland do not appear to be near any major military bases and are all at least 50-60 minutes away (by car) from any military base. This is potentially a commuting distance but due to no known military family populations in this area, it is highly plausible that these families are living geographically dispersed from the military member of their family.

A number of local authorities that fell into the top areas for number and density of military families are in the North East of England such as North Tyneside, Sunderland and Stockton-on-Tees. Potential reasons for this are unexplored, although it is known that the North East of England is an important recruitment area for the military, military families may relocate back here to be closer to their extended family. It is worth also considering that the North East is a substantially cheaper place to live in comparison to areas where military bases are located (primarily in the South of England).

The data on the location of serving personnel was based on where they worked, not where they were living. Consequently, it cannot be concluded as to whether the findings in Figure 7 and Table 7 show local authorities where military families live geographically dispersed from the military member of the family or where the serving person commutes to their posting at a local base. Additionally, families living geographically dispersed could also be living in areas where there are military personnel and therefore would not appear on this map. The family estimate does not include the families of Reservists or Full-Time Reservists (home commitment), those with children over the age of 16 or those with children in private or boarding schools. Additionally, families without children were not included; therefore, the number of families living dispersed may be underestimated. It is also worth considering families that are separated by deployment or temporary postings who may also live intermittently dispersed.

Although the SPP family estimate appears to be the most accurate publicly available dataset, caution should be taken when interpreting these findings. There are too many caveats to this data to be a plausible proxy for dispersed military families. Additionally, this dataset only represents a part of the dispersed military family community – those with children between 5 and 16 attending a state school. It is proposed that future work is required to ensure accurate data capture of not only military families but dispersed military families. By doing this more can be understood about this unique cohort. Thus, it will provide greater opportunities for communication with and from dispersed families.

5.4. Outcomes and Recommendations from Secondary Geolocation Data

Phase 1b has explore publicly available data in an attempt to identify a suitable proxy for the geolocation of dispersed military families. Findings have indicated that no publicly available data set exists that is appropriate, with each having too many caveats to effectively represent this cohort. Additionally, there are no definitive records of the number of military families. The Armed Forces Continuous Attitudes Survey (MOD, 2019f) reported that 54% of serving personnel are married, 21% are in a long-term relationship and 52% have financially dependent children. The Tri-Service Families' Continuous Attitude Survey (MOD, 2019d) estimate that 64000 Regular trained service personnel were married or in a civil partnership. However, this estimate was drawn from a self-reported, non-compulsory field on the JPA system and consequently may also be underreported.

Despite the interest in military families, there is no definitive record of the number of military families. This makes it very difficult to draw any accurate conclusion as to how many military families there are or where they live. It is important to know where dispersed military families live in order to understand their proximity to support – whether that be the military community, access to bases or their wider family.

Recommendation: A greater focus should be given to Joint Personnel Administration System used in the MOD to record information about military personnel, making completion compulsory.

Recommendation: Greater accuracy is needed regarding information on the whole of the military family such as, dispersal status and location in addition to the current declaration of marital status and dependent children.

5.5. Rationale for Phase 2

No appropriate dataset exists to determine the number or geolocation of dispersed military families. The aim of the secondary data analysis was to explore what is already known about dispersed military families. It is important to build a holistic understanding of the experience of separation for dispersed military families to be able to better support them. This is especially prevalent in the current climate, where the perceived role and identity of the military family is changing. New policies and models from the MOD such as the Future Accommodation Model and the Flexible Service Policy aim to encourage stability and increase flexibility for military families, moving away from the traditional mobile family. Existing data from the Tri-Service Families' Continuous Attitude Survey (MOD, 2015, 2016b, 2017, 2018d, 2019d, 2020g) for the last six years suggests approximately 24% of families are already living geographically dispersed from the

serving member of their family. The implementation of models and policies such as these is likely to only increase this figure.

Across England, and in the span of a decade, there has been a substantial increase in military families, in the main part, due to the relocation of military personnel from abroad. Over the last decade military personnel have been relocated from Germany and other British Bases overseas back to the UK. This relocation has seen increases in specific areas rather than evenly distributed across England. The majority of military units based in Germany are relocating to Wiltshire with around 40% of soldiers and families expected to move into new housing (Forces Network, 2018).

This is further supported by recent research from Rodrigues et al. (2020) identifying a highly uneven distribution of military families. Their results show that the majority of England's military families live in two regions: South West and South East. The key driving force behind the spatial pattern of military families can be explained by the proximity of military families to areas with a strong presence of military establishments. Rodrigues et al further highlighted the need to consider the difficulty in determining whether or not sufficient infrastructure is in place to accommodate such an increase in numbers beyond housing. Especially considering the prevalence of military families and associated military bases in non-metropolitan areas. Potential difficulties already experienced by military families are likely to only be exacerbated by such population increases and this has further implications for the availability of health and social care services in these sparsely populated non-metropolitan areas.

The findings from Phase 1a identified the focus on operational deployment in existing literature when considering the impact of military-induced separations on military families. Although it was apparent that separation impacts the psychological health of military families, it was clear that it is possible to mitigate this effect through social support. However, what impact intermittent separation has on military families (characteristic of dispersed military families) is ambiguous. Additionally, Phase 1b suggests that there are not sufficient data available to begin to build a picture of the geolocation of dispersed military families, thus it is difficult to draw any conclusions as to access to support. Due to the lack of evidence pertaining to dispersed military families as a whole and the impact of intermittent separation, it was important to use a qualitative, exploratory design to gather further information.

Despite changes in the role and identity of the military family as well as the implementation of new models and policies, not enough is known about the experiences of dispersed military families or the implications of such changes. Consequently, Phase 2 focussed on exploring the specific experiences of intermittent separation for dispersed military families.

Examining secondary Geolocation data was important for this study to understand the geographic location and potential spread of military families. It was initially proposed that findings from this section would aid participant recruitment for Phase 2. However, data has been found to be insufficient in providing an accurate proxy for dispersed military families. Consequently, the recruitment strategy was widened, connecting to national organisations who could promote recruitment to dispersed military families across the UK.

5.6. Chapter Summary

Phase 1b was an exploratory exercise to determine if there was a publicly available dataset that could be utilised as a proxy for dispersed military families. To do this, it was important to first consider an appropriate dataset for military families and then identify the appropriateness of this data for dispersed military families. Three datasets were considered: the location of stationed military personnel, the Census Armed Forces Household Reference Persons, and a Service Child Pupil Premium Family Estimate.

Each dataset provided more detailed information than the previous, however it was concluded that none were a suitable proxy for either military families or dispersed military families due to the number of limitations on the data. This led to the recommendation that a greater focus should be placed on recording accurate family-related information on the MOD's JPA system. This would allow for greater communication with military families, especially those dispersed, and would allow a greater understanding of where they reside. The lack of available secondary geospatial data highlights a need to understand dispersed families' living arrangements. By definition, dispersed military families are less likely to live on or near military bases where support is primarily located, thus, understanding dispersed military families' access to support is essential.

The cumulative findings from Phase 1 (Phase 1a and Phase 1b) set a baseline for what is known about separation in military families. To further understand what the impact of separation is on a dispersed military family, further research is required. Consequently, semi-structured interviews with civilian spouses, partners and children of tri-service UK military personnel were proposed.

This chapter has outlined the findings from Phase 1b on the secondary geolocation data.

Chapter 6. Phase 2: Semi-Structured Interview Findings

6.1. Chapter Overview

Chapter 6 will report the research methods and main findings from the semi-structured interviews with military spouses, partners, and children. Five main themes were generated through Framework Analysis: Identity, Loneliness, Well-Being, Familial Relationships, and Accessing Support. Each theme is discussed with sub-themes and supporting quotations from participants. Each quote is followed by the corresponding participant number, the rank (Officer or Other Ranks) and service (Royal Navy and Royal Marines - RNRM, Army, RAF) of the serving person, current dispersal status and length, and whether the participant had any prior experience of dispersal.

Furthermore, to ensure anonymity, the nature of the relationship participants had to the serving member of their family was not highlighted in each quote. Compared to 23 spouses, only four partners and one child took part in the interviews and it would have been possible to identify the quotes from some of these participants. Other demographic information was not included such as age or length of service as this did not have any bearing on findings.

6.2. Method

Findings from Phase 1a and Phase 1b were utilised to inform semi-structured interviews with civilian partners, spouses, and children of dispersed tri-service military personnel. The aim was to determine the psychological impact of geographical dispersal and explore the social impact of military families living geographically dispersed.

6.2.1. Participant Recruitment

Due to difficulties in accessing the dispersed military families' community, a mixed recruitment strategy was utilised, resulting in convenience sampling through social media as well as a purposive snowball sampling through the listed organisations detailed later. This mixed strategy helped to reduce sampling bias often highlighted as a concern in qualitative research methods (Hamilton & Bowers, 2006).

Recruitment took place primarily through social media sites; Twitter, Facebook (including Facebook pages and groups), and Instagram. Posts were re-posted or shared and disseminated through personal accounts, supervisors' accounts, and third-party accounts (i.e., social media users who chose to share the recruitment information). Social media, was chosen as a recruitment aid as research has shown this to be a successful method in accessing hard-to-reach populations in comparison to traditional recruitment methods and has been found to be cost-effective (Fenner et al., 2012; L. Jones, Saksvig, Grieser, & Young, 2012; O'Connor, Jackson, Goldsmith, & Skirton,

2014). Dispersed military families appear to be a hard-to-reach population due to the lack of accurate data available on the geolocation of this cohort. Consequently, utilising social media ensured a greater reach for recruitment across the UK through various support organisations.

Social media has not always been identified as a successful recruitment method. Topolovec-Vranic and Natarajan (2016) reviewed 30 papers and found that in half of the papers, social media was not the most effective method for recruitment. However, the authors did determine that the effort put into the recruitment via this method correlated with the number of participants recruitment through social media. Consequently, for social media recruitment strategy to be successful, this was the primary method used.

To maximise recruitment opportunities, a number of organisations were also contacted to support, promote and help facilitate further recruitment:

- Army Families Federation
- Army HIVE (Army Welfare)
- Naval Families Federation
- Northern Hub for Veterans and Military Families Research (Northumbria University)
- Sheffield Mind (Keeping Families in Mind service for Military Families)
- RAF Families Federation
- RAF HIVE (RAF Welfare)
- Veterans and Families Research Hub (Anglia Ruskin University Veterans & Families Institute for Military Social Research and Forces in Mind Trust)

These organisations facilitated recruitment through promotion on Twitter, Facebook, Blogs, and emails. The organisations were approached due to their connection with the UK military community, through their staff, network, and beneficiaries. For military families, these are the prominent organisations providing information and support. These organisations represent military welfare services, third sector organisations and academic research hubs whose primary focus is to work with military families. Many of these are not only connected to the military due to their focus but are often ran by members of the UK military community.

Accessing participants through trusted and connected organisations is reminiscent of peer-recruitment techniques. Peer-recruitment bridges the gap between researchers and potential participants by building on existing social connections and mutual understanding. Additionally, research has indicated greater success rates in participant recruitment with peers, especially for hard-to-reach populations (Tiffany, 2006). Although there is an argument that peer-recruitment can result in an unrepresentative

sample, literature has highlighted that such strategy facilitated researchers' access to participants that they may not have previously been able to access (see Ellis et al., 2007; Ngune, Jiwa, Dadich, Lotriet, & Sriram, 2012). Reaching out to these trusted organisations also fostered networks and interest in the PhD topic. This will be highly beneficial in post-doctoral research which will seek to carry forward any recommendations arising from this research. See section 7.10 for a reflective passage on the role of my own experience in recruiting and researching military families.

Further recruitment took place through posters around Northumbria University, networking at events (opportunity sampling), and through snowball sampling. It was important to include Northumbria University as a location for recruitment as it was felt that it was an opportunity to target staff and students who may be living geographically dispersed from the military member of their family. Northumbria University was awarded a Silver in the Defence Employers Recognition Scheme, which can only be awarded if the University employs and supports members of the military Community. Additionally, there are a number of military bases in the North East of England and Northumbria University is one of a handful of higher education institutions in this region. Spouses, partners, and children of military personnel are likely to access Northumbria University for higher education as a local University.

The target sample size was between 25 and 30 participants, from around 15 families. However, difficulties arose recruiting multiple participants from the same family. A large number of participants did not have other family members who met the eligibility criteria (often due to age) or were not interested in taking part. The focus of recruitment was therefore placed on the number of individual participants rather than the number of families.

6.2.2. Participant Eligibility

All participants were civilian spouses, partners, or children of UK military personnel, of Regular or Reserve service from the RNRM, British Army and RAF. Participants were over the age of 16 and had to be living or had lived separately to the military member of their family at some point in the two years previous. Living separately must have been as a result of a non-operational military-induced separation, and not as a result of a relationship breakdown. All participants must have been residing in the family home, in the UK. There were no restrictions on gender, no one was excluded on the ground of mental health issues or cognitive impairments, and no military personnel were interviewed.

6.2.3. Participant Demographics

Twenty-eight participants were recruited, aged between 23 and 52 (mean age = 36.5, SD = 8.7) from across England and Scotland (see Figure 8 for map of participant locations). There were 23 spouses, four partners, and one child of UK Armed Forces Personnel.



Figure 8. Locations of participants (N=28)

Fourteen participants were recruited through Facebook (pages and groups), seven through Twitter, four through word of mouth, two through the Army HIVE blog, and one through Instagram. All participants were female (see Table 8 for participant demographics and Table 9 for the demographics of the military member of the participants' family, both split by relationship status). As only one 'child' took part, the demographics for children is not reported separately to protect anonymity but is reflected in the total. Eleven participants were family members of Royal Navy and Royal Marines (RNRM) personnel, 11 participants of Army personnel and 6 participants of Royal Air Force (RAF) personnel.

Table 8. Demographics of participants split by relationship status to the serving member of the UK Armed Forces.

| | Spouses (n = 23) | | Partners (n = 4) | | Total (N = 28) | |
|--|-------------------------|--------------|-------------------------|--------------|-----------------------|--------------|
| | <i>Mean (SD)</i> | <i>Range</i> | <i>Mean (SD)</i> | <i>Range</i> | <i>Mean (SD)</i> | <i>Range</i> |
| Age (years) | 38.5 (8.2) | 23.0 – 52.0 | 30.0 (4.7) | 25.0 - 36.0 | 36.5 (8.7) | 23.0 – 52.0 |
| Length of current/recent dispersal (years) | 4.6 (3.6) | 0.3 – 12.0 | 3.5 (1.8) | 1.7 - 6.0 | 4.4 (3.3) | 0.3 – 12.0 |
| | <i>Number</i> | <i>%</i> | <i>Number</i> | <i>%</i> | <i>Number</i> | <i>%</i> |
| Gender | | | | | | |
| Male | 0 | 0 | 0 | 0 | 0 | 0 |
| Female | 23 | 100 | 4 | 100 | 28 | 100 |
| Dispersal | | | | | | |
| Currently dispersed | 21 | 91 | 4 | 100 | 26 | 93 |
| Dispersed within last 2 years | 2 | 9 | 0 | 0 | 2 | 7 |
| Prior experience | | | | | | |
| Previously dispersed | 9 | 39 | 0 | 0 | 10 | 39 |
| No dispersal experience | 14 | 61 | 4 | 100 | 18 | 61 |
| Dispersal by choice? | | | | | | |
| Yes | 9 | 39 | 3 | 75 | 13 | 46 |
| No | 14 | 61 | 1 | 25 | 15 | 54 |

Table 9. Demographics of the serving member of participants' family, split by relationship status to serving personnel.

| | Spouses (n = 23) | | Partners (n = 4) | | Total (N = 28) | |
|---------------------------|-------------------------|----------|-------------------------|----------|-----------------------|----------|
| | <i>Number</i> | <i>%</i> | <i>Number</i> | <i>%</i> | <i>Number</i> | <i>%</i> |
| Personnel Service Type | | | | | | |
| Royal Navy | 7 | 30 | 2 | 50 | 9 | 32 |
| Royal Marines | 2 | 9 | 0 | 0 | 2 | 7 |
| British Army | 8 | 35 | 2 | 50 | 11 | 39 |
| Royal Air Force | 6 | 26 | 0 | 0 | 6 | 21 |
| Personnel Engagement Type | | | | | | |
| Regular | 22 | 96 | 4 | 100 | 27 | 96 |
| FTRS Full Commitment | 1 | 4 | 0 | 0 | 1 | 4 |
| FTRS Home Commitment | 0 | 0 | 0 | 0 | 0 | 0 |
| Reserve | 0 | 0 | 0 | 0 | 0 | 0 |
| Personnel Rank | | | | | | |
| Officer | 11 | 48 | 2 | 50 | 14 | 50 |
| Other Rank | 12 | 52 | 2 | 50 | 14 | 50 |

The current or most recent dispersal that participants had experienced ranged between 3 months and 12 years in length. Only two participants were not living dispersed at the time of the interviews. Of the participants who were living dispersed, 19 had been for 0-5 years (7 RNRM, 8 Army, 4 RAF), four had been for 6-10 years (1 RNRM, 2 Army, 1 RAF) and three participants had been living dispersed for more than 11 years (all RNRM). The five-year time point can be linked to the publication of the 2015 National Security Strategy and Strategic Defence and Security Review and the Armed Forces Families' Strategy. The ten-year mark can be attributed to the launch of the 2010 Defence and Security Review. See section 1.5 for more information on the impact of these UK initiatives on military families.

Seventeen participants had never lived dispersed before their current dispersal (82% of RNRM, 54% of Army and 33% of RAF participants). Moreover, ten participants had never lived in military accommodation (45% of RNRM, 36% of Army, 17% of RAF participants).

6.2.4. Materials

To aid participant recruitment, a recruitment poster was created (see Figure 9) detailing the eligibility criteria for the study and details to contact the researcher. Once participants got in contact, they were given a participant information sheet (Appendix G), providing the aim of the study, and detailing what was required of them to participate. This also included contacts and links to the research team in case they wanted any further information or wanted to ask any questions, and information for external organisations for further support if required.

Northumbria University
NEWCASTLE

Are you part of a military family? Do you live away from the serving member of your family?

We would like to speak to you about your experience of living dispersed, focussing on the impact of separation on your family.

Interview 45 minutes Location convenient for you

Inclusion Criteria

- you are at least 16 years of age
- you are a civilian spouse/partner or child in a military family who is living or has lived separately to serving member at any point in the last 2 years
- living separately is/was as a result of the non-operational deployment of the serving member (Regular or Reserve service). This does not include living apart because of relationship separation

Please contact Alison Osborne for more information and how to take part: alison.osborne2@northumbria.ac.uk | 0191 215 6008
This study has been granted ethical approval through Northumbria University's Ethical Approval System (Ref: 9055)

Figure 9. Online Recruitment Poster

Alongside the information sheet, participants were also issued with a consent form (Appendix H) detailing terms and conditions of participation which they were required to

sign if they were happy to participate. In addition to agreeing to take part in the study, participants were asked to confirm they had read and understood the participant information sheet, had an opportunity to ask questions, understood their right to withdraw, agreed to participate in a recorded interview, understood their anonymity and gave permission for their information to be used in the future and as part of further work on this subject. There was a box for participants to tick to confirm each agreement, followed by a space to sign and date. The researcher was also required to sign and date the consent form.

Before starting the interview, participants completed a brief demographics questionnaire (Appendix I) covering basic information about themselves, including information about their family, dispersal, and the military member of their family. The questionnaire asked individuals to record their gender, age, relationship to military member of their family, size of their family, experience of living in military accommodation, dispersal status and reason. It was important to collect this information to be able to consider any potential differences in the impact of separation. Details on the military member of the family was restricted to service, engagement type, rank, and length of service in order to retain anonymity and security for military personnel. No information was obtained regarding units, regiments, squadrons, ships, current postings, or deployments. Where these were discussed in interviews, information was removed for anonymity.

For those that took part in an interview on Skype or over the phone, consent forms and demographics questionnaires were completed electronically. Participants who took part in face-to-face interviews completed paper copies of the consent form and questionnaire.

Findings from Phase 1 aided the development of a semi-structured interview schedule (Appendix J) that was utilised in each participant interview. The semi-structured interview schedule followed six topics, with questions and prompts: background on dispersal, impact of separation, role of support networks, identity, wider impact of dispersal on career and education, wider support, and policy. Follow-up prompts were also included to ensure all avenues had been explored in the interviews. These included a focus on the mental health of participants during separation, and a prompt to give the participants a chance to explore any additional topics they felt appropriate to discuss that may not have already been covered in the interview.

All interviews were recorded using a Dictaphone. Express Scribe Transcription Software was used to aid transcription of audio files. All recordings and transcripts were uploaded into NVivo 12 for analysis (see 6.2.6 for more detail).

6.2.5. Procedure

Primarily, as a result of social media posts, participants got in touch through email or phone, identifying their interest in taking part in an interview. Each participant was given as much time as they needed to read through the participant information sheet. If participants did not get back in touch within two weeks, one follow-up email was sent. All individuals were given the opportunity to ask any questions that they had. Once they were happy to proceed, they were asked to confirm their interest in taking part by completing the consent form.

Following this, an interview was set up at a time and place convenient for them. Interviews were either face-to-face, over Skype or on the phone depending on the participants' preference and the feasibility of travelling to their residing location. For interviews over Skype or on the phone, consent forms were emailed, signed and returned prior to the interview along with the demographics questionnaire. For all participants, consent forms and questionnaires were completed before interviews began. Participants took part in one interview lasting around 45-60 minutes. Interviews were recorded using a Dictaphone and transcribed verbatim.

6.2.6. Analysis

All transcripts were entered into NVivo. NVivo is a qualitative data analysis computer software package produced by QSR International, designed for qualitative researchers to help organise and analyse non-numerical or unstructured data. The software allows researchers to classify, sort and arrange information; examine relationships in the data; and combine analysis with linking, shaping, searching, and modelling. Observations can be made in the software, building a body of evidence to support the research aim that can be traced back to initial coding.

Transcripts from the semi-structured interviews were analysed using Framework Analysis. Framework Analysis identifies commonalities and differences in qualitative data with consideration given to the relationships between parts of the data, resulting in the development of descriptive and/or explanatory conclusions around themes (Gale, Heath, Cameron, Rashid, & Redwood, 2013). Framework Analysis has been utilised to help achieve specified aims and outputs as well as to facilitate the systematic analysis of data and has been used in applied policy research (Kiernan & Hill, 2018; Ritchie, Lewis, Nicholls, & Ormston, 2013; Ritchie & Spencer, 2002). Framework Analysis was chosen over alternate qualitative data analysis such as grounded theory as it is better adapted to research with specific questions and a limited time frame. The main focus of Framework Analysis is to generate themes to describe and interpret what is happening in a particular phenomenon (Ritchie & Spencer, 2002)

At the centre of Framework Analysis is the matrix output. The matrix is characterised by cases (participants) and codes as rows and columns respectively, with each 'cell' summarising corresponding data. It is this matrix that provides a structure for systematically reducing qualitative data to be analysed by case and by code (Ritchie et al., 2013). It is important to consider some of the concerns that literature has highlighted around the matrix output. The spreadsheet format can increase the temptation to quantify qualitative data such as '*12 out of 28 participants said...*' (Srivastava & Thomson, 2009). This is problematic as the purpose of qualitative research is to capture the diversity around the phenomenon (Polit & Beck, 2010).

However, Framework Analysis provides the opportunity for in-depth analysis of the whole dataset to be carried out whilst the quotes from each participant remain within the context in which they were initially discussed. Framework Analysis allows the exploration of commonalities across the dataset as well as any potential differences that may arise in individual experiences, particularly as a result of differing demographics. There were seven stages to the Framework Analysis (see Gale et al., 2013):

Stage 1 - Transcription: The first stage was the transcription of the audio from the semi-structured interviews. This was the first opportunity to become immersed in the qualitative data. The focus of the transcription was on the content of the interviews. The specific nuances of dialogue such as pauses, or simultaneous talking were not required.

Stage 2 - Familiarisation: Becoming familiar with each transcript and any contextual or reflective notes was a vital part in interpreting the data. This stage ensured immersion in a pragmatic selection of the data by reading all of the data within the selection (Pope, Ziebland, & Mays, 2000).

Stage 3 - Coding: After familiarisation, all transcripts were coded. Coding aimed to classify the data so that it could be compared systematically across the dataset. In addition to gaining a holistic impression of what was said, this coding can highlight aspects of the interview that may not have otherwise been identified if not clearly expressed.

Stage 4 - Developing a working analytical framework: After coding the first few transcripts, the next stage involved taking the familiarised and coded data and identifying the key issues, concepts, and themes by which the data could be referenced. By the end of this stage the initial data was grouped into manageable chunks and a thematic framework was established.

Stage 5 - Applying the analytical framework: The analytical framework was then applied by indexing the rest of the transcripts using the existing categories and codes. Qualitative data interpretation is by intention, very subjective. However, by applying this

framework or index to all the data the judgements and assumptions of what the data means to the researcher is made transparent for all to see (Ritchie & Spencer, 2002). It is this level of transparent and, potentially, replicable indexing and labelling of all data that adds robustness to this method of data analysis.

Stage 6 - Charting data into the framework matrix: By this stage, the data was sifted and sorted into core themes in preparation for summary, interpretation, and mapping. A matrix was generated, and the data was 'charted' into the matrix summarising the data by category from each transcript. Pope et al. (2000) describes the charting stage as re-arranging the data into the appropriate parts of the thematic framework.

Stage 7 - Interpreting the data: Finally, the main findings were drawn from the indexed and sorted material, drawing out the characteristics and differences between, across the data. These findings are traceable back through the index/framework to the verbatim transcript of a particular participant.

6.2.7. Ethics

Full informed consent was gained from all participants. Individuals aged between 16 and 18 did not require parental consent and were treated as adults in line with guidance from the Medical Research Council (MRC). The MRC ethics guide for Medical Research Involving Children (MRC, 2004, p. 23) states "*young people between the age of 16 and 18 are presumed to be competent to give consent*". This was the case for England, Wales, Northern Ireland, and Scotland. Additionally, much research has been conducted on age limits of potential participants deemed to be competent to decide on research participation. Specifically, it has been noted that those aged 11.2 and above are 'decision-making competent' (Hein et al., 2015).

The exclusion criteria did not exclude anyone with mental health issues as it was important that everyone with capacity was given the opportunity to contribute to this work. Upon initial contact with potential participants, there was a discussion regarding what the research was about and what would be required of them if they decided to participate. The participant themselves decided if they were able to consent, however, if there were any concerns about the ability of the potential participant to take part, this was discussed prior to participation in the research. It was also agreed that, if as an interview progressed, it was apparent that the individual was in fact unable to match their consent given, the interview would be terminated, and a decision would be made with the supervisory team as to whether the participant's data would be used in analysis. This was not the case for any participant.

However, one participant identified as having Autism and was concerned that their difficulty with change may have impacted their experience as a dispersed family. This

was discussed prior to participating in the interview and it was agreed that they were still able to take part. Furthermore, throughout the interview process it was clear that some participants may have had common mental health issues such as depression and anxiety. This was being managed and did not impact on the interview.

Each interview was followed up with an email to thank the participants for taking part and reiterate the support available (detailed on information sheet). It was acknowledged that the interviews may cause some discomfort or distress so it was important to follow-up the interviews to ensure participants were made aware of the available support they could access if they needed any. Participants were made aware that they could pause or terminate the interview at any time including telephone and Skype interviews.

To ensure that data was anonymous and unidentifiable all participants were given an identifiable number, e.g., P01, P02. This ensured multiple data sources could be linked whilst remaining anonymised. Names (including names of other individuals) were removed during transcription of the data, and participants were referred to using their identifiable number from that point onwards. Any other information deemed to be identifiable was removed from the data (i.e., individuals' names, places, or military information).

All consent forms and data from the questionnaires were stored in a locked filing cabinet in a locked office at Northumbria University, Coach Lane campus. All electronic data was stored on a password protected computer, on Northumbria University's server (U Drive). Only the research team had access to this data.

This project was approved through Northumbria University's Ethical Approval System (Ref: 9055).

6.3. Themes

The initial familiarisation stage of Framework Analysis resulted in the coding of participants' transcripts (see Appendix K for list of codes generated during the familiarisation and coding stages). Codes can be grouped together into two clear categories by which the data could be referenced: psychological consequences, and social support, thus forming the analytical framework. Once developed, the analytical framework was applied, indexing transcripts in line with these categories and codes. Consequently, this data was sorted into five themes: Identity, Loneliness, Well-Being, Familial Relationships and Accessing Support (see Figure 10 for the development of these themes). Sub-themes are also reported.

Although the data was ultimately sorted into five themes, much of these findings overlap. Consequently, themes and sub-themes are referenced to each other throughout (see Figure 11 for a visualisation of the interaction between sub-themes). This is unsurprising given the intersecting nature of psychological and social constructs (see Hayward, 2012). In line with the aims of Phase 2, these themes represent the main findings in an attempt to determine the psychological and social impact of intermittent separation on military families.

As part of the interviews, participants were asked if there was anything they wished was available to support them as a dispersed family. These recommendations are presented in relevant themes, throughout the findings.

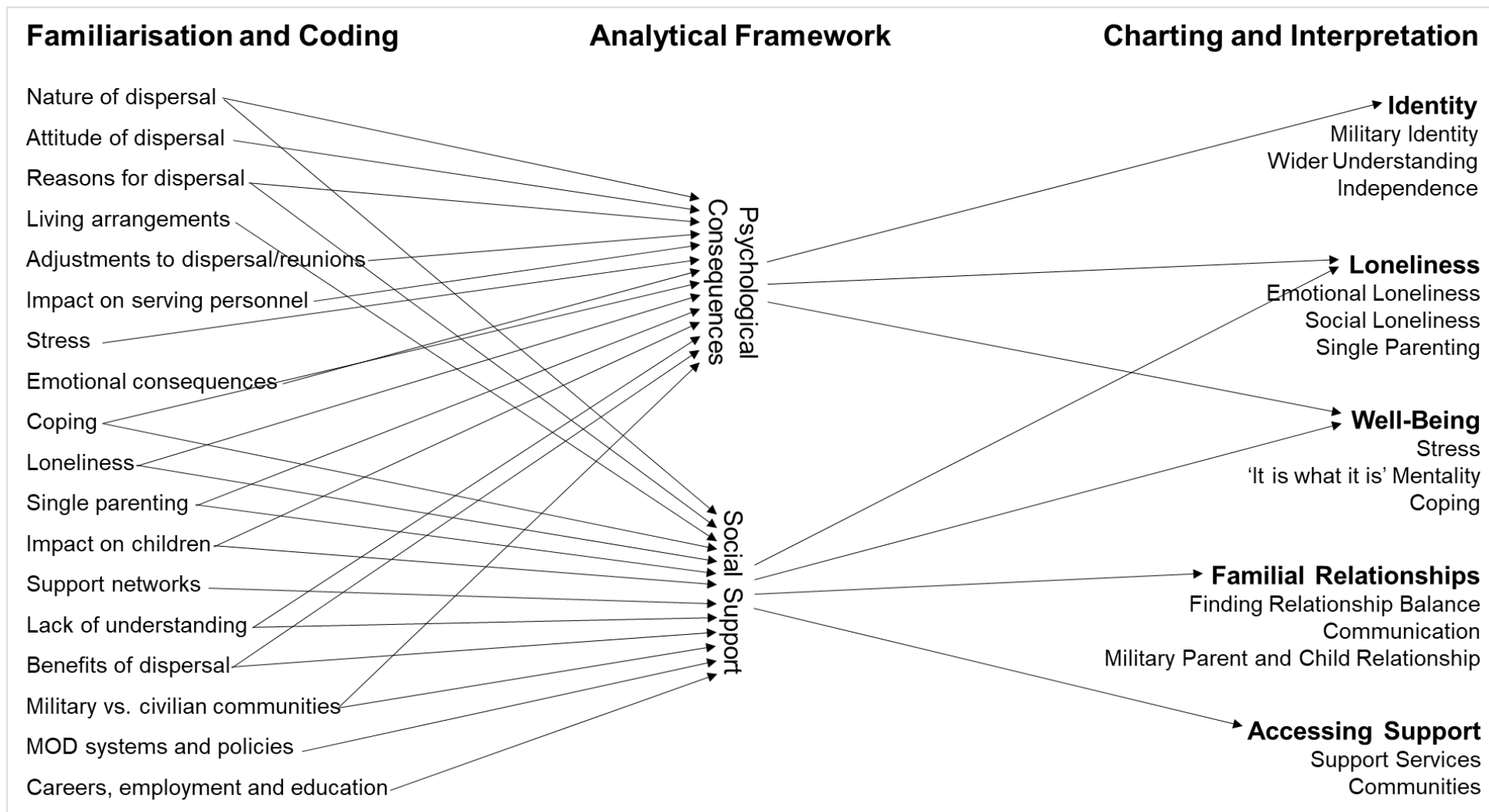


Figure 10. Development of themes through the framework analysis

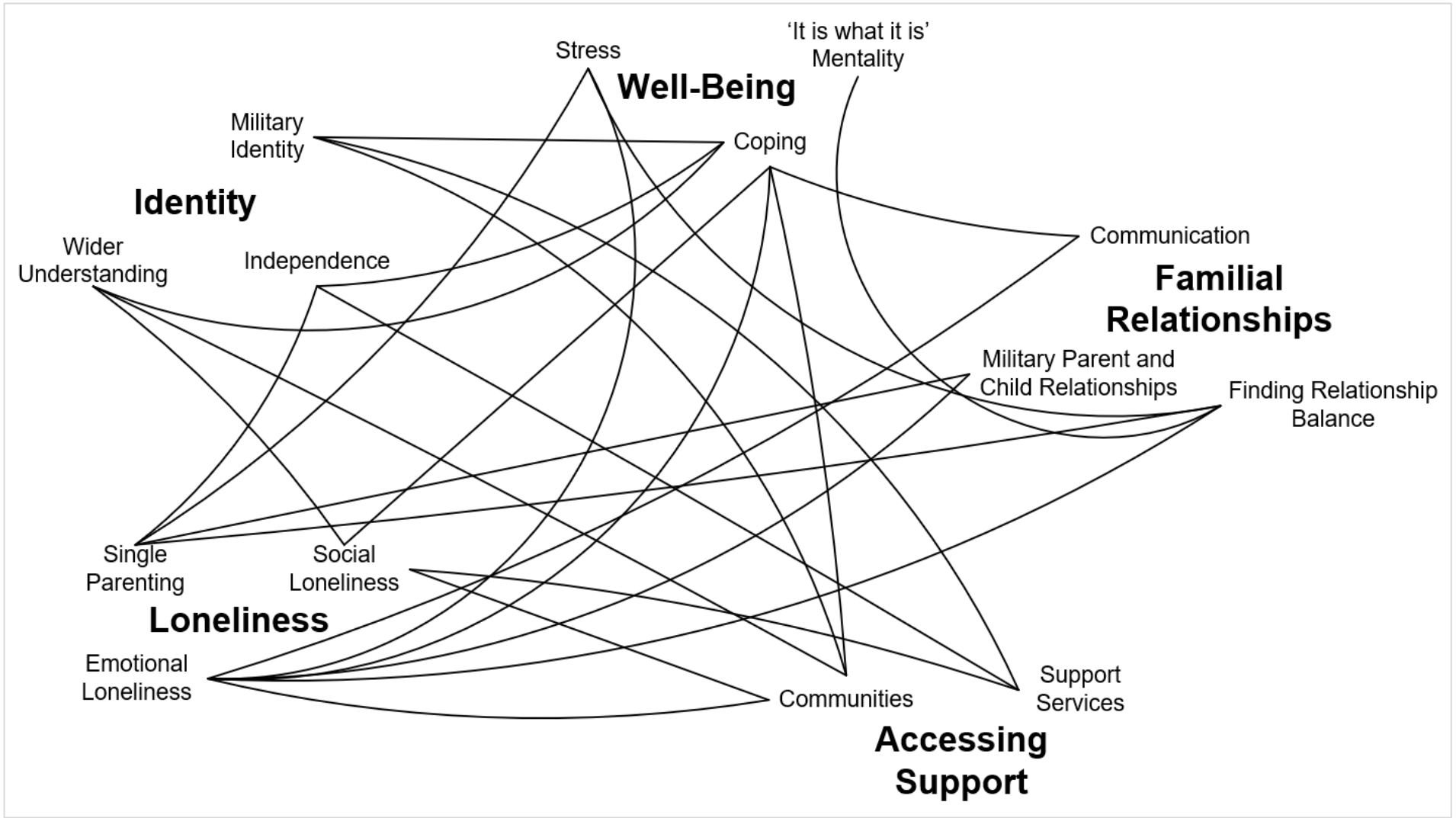


Figure 11. Interaction between sub-themes

6.3.1. Identity

Throughout all transcripts, it became evident that identity was at the centre of participants' experience of separation (see Appendix L for the associated coding generated at the familiarisation and coding stage of Framework Analysis). Participants' identity as both a military family, and their identity within civilian and military communities, was the underlying focus throughout their interviews. This was not just how the participants viewed themselves, but also how they perceived they were viewed by others.

An understanding of their situation from military and civilian communities was discussed, with the majority of participants reporting a lack of understanding from both communities. This lack of understanding made it difficult for participants to reconcile their identity and role within either community.

Furthermore, experiencing separation was often credited with fostering independence. Greater opportunities to explore interests and socialise, as well as greater responsibilities for the household and finances, were at the centre of this increase in independence. There was also a greater increase in the demands of parenting for those with children.

Three sub-themes were generated: Military Identity, Wider Understanding, and Independence.

6.3.1.1. Military Identity

Military-induced separation appeared to impact the extent to which participants identified as being a part of a military family or being part of the military community. Their 'military identity' thus affected their sense of inclusion within social circles, access to support, and their feelings of loneliness.

Participants were often torn between being part of the civilian community as a dispersed family, and remaining part of the military community as a military family. A lack of access to the military community in terms of communication, access to military bases and support, made it difficult for participants to feel a part of it.

"I want to be more part of (military community) in different ways but I don't see where I really fit because we've never been on a camp or anything and it's not that sense of belonging in that way to the community. Erm, so I feel a bit on the fringes I would say. Cos there's no kind of social groups" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"We don't really feel a forces family anymore. We have no contact with where he is working or what's going on" [P02, family of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

"Clearly I'm a forces wife but I'm not a typical forces wife. I don't live on a married patch anymore" [P17, family of Other Ranks (RNRM), currently dispersed 2 years, no prior experience of dispersal]

For most participants there appeared to be a desire to be a part of the military community, or at least have greater access to it and this was consistent regardless of whether participants were family of those in the Royal Navy, Army or RAF.

The disconnect participants experienced with the wider military community often stemmed from a geographical disadvantage. Primarily, participants living dispersed resided in areas away from military bases and the wider community. This made it physically difficult for them to access 'on-base' support and to connect with other military families.

"Suppose it would have been different if I'd moved to you know to military town or something like that, stayed within that community. The people would understand but I find it hard here being you know, being here that there is no connection" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

For many participants, their understanding of their military identity was compounded by how they perceived the military and how the community viewed dispersed families (see also 6.3.1.2 Wider Understanding). This appeared to be directly linked to participants' perceived 'value' to the military and the community as a whole.

"It's almost dismissing the families and that's, I find that the most frustrating part of it, is that you know you can't. It's not a normal lifestyle so you have to consider them" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

"I think for me the kind of big thing is sort of lack of the lack of sort of appreciation and acknowledgment of it in the kind of support provisions that exist. And the kind of needs addressed I guess" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

Both participants quoted above, had no prior experience of dispersal, but were able to compare their experiences as a mobile family living on base to their current dispersed lifestyle. This knowledge of existing support available to military families and the discrepancy of the perceived support available to dispersed families exacerbated participants' feelings of being undervalued.

"That's just how we feel now, we, we have no contact with the forces. My husband goes to work but yeah, they're not interested in us. I get my copy of Envoy in the post because I've requested it, but other than that, yeah, nobody knows or cares where we are" [P02, family of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

"I think it's just recognising that there is more to life than the army and spouses aren't just an adjunct, they're not just an extra part, they are their own person. They have got their own life as well and they should try and support that rather than being a tag on" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

Furthermore, not feeling valued or considered by the military created further disconnect with feelings of belonging within the military community. In turn, participants struggled

with their military identity. Most participants defined themselves as a military family but did not identify as part of the military community.

“I would still identify as a military family, but it’s not sure I would say we feel part of the community” [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

“I feel quite separated from that community in that aspect but then my life is dictated by the army in many ways, and I do feel like military kind of family” [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

“You do kind of feel you have been left out” [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

“We’re not like in camp, I think we are like the kind of forgotten few” [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

A lack of connection to the military community as a result of military-induced separation, appeared to impact participants’ military identity. However, it was also clear that the way participants viewed their military identity affected their experience of separation. This causal relationship was especially prominent for participants who had always lived dispersed from the serving member of their family and had no experience of living as a mobile family ‘on-base’. Having their own identity beyond being a military spouse or partner was very important.

“I’m a [JOB TITLE], I’m a, a friend, a daughter, a sister and trying to understand academia and then I’m also with someone in the army rather than I imagine if I was a military wife living on camp. I would be like I’m an army WAG” [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

6.3.1.2. Wider Understanding

Participants’ experience of dispersal and subsequent separation was linked to the wider understanding of their situation from both civilian and military communities. For many participants, there was a struggle to find their place in either community due to a lack of understanding of their situation as a dispersed family.

“I think within the armed forces kind of community I don’t think the impact of that kind of longer-term weekending kind of lifestyle is really recognised fully” [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

“The first thing people tend to ask ... oh does he live away kind of and then people say oh it must be difficult mustn’t it because my husband sometimes he goes away and he works away for a couple of nights and I think you want to try and be away from your husband for 6 months... he didn’t get back at all in the 6 months and that were really hard but people were like oh no, my husband’s going away on a like stag weekend and I’ll be like, how do you compare a stag weekend you know” [P04, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Despite attempts to draw comparisons to their own lives, participants, found it hard to connect with civilian communities. These comparisons further highlighted the disconnect and lack of understanding of dispersed military families. As discussed previously, a connection, or lack thereof, to the wider military community affected participants’ military

identity. Not being understood or 'welcomed' at certain events, pushed participants further away from a military identity.

"It's like so unwelcoming and so you know, you just felt really like you really weren't part of this, you know you were you know a danger on base since you know you are not living there" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

Participants experienced difficulties in visiting the serving member of their family on-base. This creates a greater divide between families and the military community, accessing on-base support or attempting to visit friends on camp. Additionally, the majority of military welfare centres are based on camp, many behind the wire, making it increasingly difficult for families to access this support. These barriers are perceived as a lack of understanding on the military community's behalf of the nature of dispersal.

When participants were able to access the military community, many experienced further difficulties in communicating and engaging with other military families. This is due to problems in feeling a shared connection with others. The prevalence of mobile families living on-base can also affect dispersed families' ability to create lasting connections with other military families as each time they visit, there are different families.

"They all bond over things like leaving their family, their home life to be with their partner and there is that underlying feeling that they perhaps think that you don't love your partner as much as they love theirs because you haven't left your career for them and think that narks me" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

"I mean we go and visit [NAME] wherever he is but because we are hardly ever there. We know a few people, I know a few people there, not many you know, and the kids don't really know anybody there or by the time we visit again a few months later, folks that they've met, they've moved on erm, so not sure I would say that we do feel part of the military family" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

This was a similar experience for participants trying to engage with civilian communities. A lack of belonging with either communities led participants to feeling isolated and often alone with few people to connect to (see also 6.3.2.2 Social Loneliness).

"I tend to I don't tend to share a lot with civilian friends because they don't, they, there is almost a judgment in the fact that it's a lifestyle choice erm, and actually it's not a lifestyle choice. It's the situation I'm in because I've married somebody who has a job that this happens in" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

"Just little things like that people probably don't realise how important the weekends are for us. I think because again I think I am quite resilient I don't really talk about it that much they probably don't understand the inner struggle that I don't really talk about" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

Again, for participants who had prior experience of living on-base, these experiences created a further disconnect between their military identity and their place within the military community.

It is important to acknowledge that not all aspects of the civilian community were thought to have a lack of understanding. Although some participants indicated potential problems with employers in understanding their family life and the impact of separation, this was not always the case.

"I've been so lucky for where a work, just having really empathic managers, they just been really supportive, they do get this, like you know if he went away on deployment or if he was just coming back and a just needed a random couple of days off, unless there was something major, major that was really bad they'd always like get it and give that leeway" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"My manager and everything, they're quite supportive and stuff like that and obviously when my husband was in [LOCATION] they made sure that I could swap my weekends because I work in retail, so I have to work weekends. That if I need a weekend, my husband coming up that I could get a weekend off and stuff like that so I could arrange bits that way, so they have been pretty good" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

Some participants found that understanding employers ensured that the impact of separation on their family life had a minimal effect on their careers due to appropriate adjustments.

Some of the challenges participants found surrounding their identity was due to the wider understanding of dispersal from both civilian and military communities. In an attempt to combat these challenges, participants suggested the need to focus on raising awareness of dispersal in both communities.

"Less about support and more about awareness perhaps. Because at times with him being away it has felt as difficult as a deployment and it has felt as lonely as a deployment. But as far as anyone is concerned like, he's going to work at like 8 in the morning and he's finishing at 4 like, it's a normal day to day job but it's not because he's not coming home at the end of it, he's going back to the mess. There isn't that same level of like, not respect but awareness of what he was doing and an awareness how it impacts everyone around him. Like if you were to say, 'oh yeah, my husband's in the Gulf for six months', everyone understands that 'oh that's terrible', but if you say like, oh yeah my husband's working in Newcastle for the next 6 months, there like, oh well, go and visit him. So, yeah. Probably an awareness more than support, I think" [P28, family of Officer (RNRM), currently dispersed 1 year, no prior experience of dispersal]

6.3.1.3. Independence

For many participants, primarily spouses, living dispersed provided greater opportunities to explore their own wants and desires, and more time to spend exploring interests and socialising. It also gave them greater responsibilities as they often had no choice but to take control of the household, finances, and the bulk of parenting, for those who had children (see 6.3.2.3 Single Parenting).

"I laugh at people who went, oh my husband's not well, I had to take the bins out. Here's me going laughing, that's what your worried about, the bins, I went I do that, I cut the grass I do this I do everything... You know what I mean, you just laugh at other people that never had to, you just get on, you have to be the mother, the father, the everything at one point. I think, you are a lot stronger if you can get through that. You're a lot stronger in yourself so I think it's made this process not so bad" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

"I've never had to been able to have a career because I've followed my husband's career. So, for me to be able to get a job and say oh I actually love me job and think oh I'm actually going to be able to stay in this job. You know it's being a first because you know, I've never been able to do that." [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Being able to hold down a job securely, and with the potential of a career was a positive consequence of dispersal. The ability to work provided participants with a sense of independence and responsibility separate from their identity as a military spouse/partner. For participants who were employed, the ability to contribute to family finances was also often cited as a positive aspect of dispersal. This was particularly important for those who highlighted the potential extra costs of living dispersed and the resulting financial strain.

"It's nice to go to work, be able to work and be able to earn some money. You know be able to say, 'oh I actually earn some money'. Because before it was just my husband who was the earner. You know I mean I don't earn thousands and thousands, but you know I can at least say oh well I'm bringing something to the table. I couldn't before because I was like moving every two to three years. So, it does make a difference being able to go to work." [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

I think it I mean it has a big impact on finances, the whole dispersed living with all the travelling, commuting and the choice that I've made to work part time. That's fairly significant impact as well. [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

Potential financial issues were most often discussed by participants who were family members of serving personnel of Other ranks, although it was not exclusive to this group.

A number of participants also felt that the separation made them a 'stronger' person, emotionally and through their increased independence (see also 6.3.3 Well-Being).

"I realised because I've had so much time away from [SPOUSE] and he's a very strong person, very confident, black and white, quite different, over the years I was quite dominated by him, not in a bad way, but because he's a natural leader and I'm not. But actually, with the separation I sort of came into my own" [P14, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

"I need to do a bit more for myself and I think that's like a really good thing. I think it's like made me more independent. I'm a stronger person I think" [P22, family of Officer (Army), currently dispersed 4 years, prior experience of dispersal]

"You know I do live on my own I do you know manage when he's not there and I realise I am a lot more independent than I ever thought I was... I think it's given me quite a lot of strength as well even though I do have sad times" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Separation offered participants the opportunity to explore their identity and sense of self, with many crediting dispersal with fostering their independence. However, independence was not only seen as a potentially passive consequence of separation, but as a positive experience of separation and something one should strive for.

“You’ve got to have your own interest because if you don’t, if you whole life is based around them you never survive in the military. You’ve got to be able to do you know be independent have your own interests” [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

Little to no communication was reported between the dispersed families and the military, whether that be with other families, military bases or directly with the MOD. Families appeared to rely on themselves reaching out for information, often resulting in restricted and one-sided communication.

“That’s just how we feel now, we, we have no contact with the forces. My husband goes to work but yeah, there not interested in us. I get my copy of Envoy in the post because I’ve requested it, but other than that, yeah, nobody knows or cares where we are” [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

Information was often sought through alternative forms such as the Family Federations’ magazines and social media. Those that do not live in service family accommodation or in areas near military bases often do not have the connections with the military community. Ownership is placed on the dispersed family to ensure they are kept up-to-date and in contact with the military (see also 6.3.5 Accessing Support). This lack of communication furthered participants independence.

6.3.1.4. Theme Summary

The identity to which participants ascribed to appeared to fluctuate in relation to separation. Difficulties were experienced in determining where participants felt they ‘fitted’ in either civilian or military communities due to a lack of shared experience and perceived lack of understanding from others. There was a disconnect between identifying as a military family in practical terms and not feeling part of the military community. However, for many participants, separation allowed them to become more independent. They experienced greater responsibilities for the household, finances, and the parenting role (for those with children). Stability of home life meant that participants could explore employment and career opportunities as well as any interests and hobbies. Many participants strived for this independence but also acknowledged they had little choice but to become independent. Participants suggested that there needs to be a focus on raising awareness of dispersed military families in both military and civilian communities.

6.3.2. Loneliness

Experiences of loneliness underlined participants' dialogue throughout. Feelings of loneliness were experienced by participants as a result of physical and psychological isolation from others. Despite the development of independence, feelings of loneliness were prominent in almost all participants explanations of how dispersal affects their lives. Participants experienced both emotional and social loneliness. For those with children this loneliness was extended to and often exacerbated by feeling as though they were a single parent during separation from the serving member of their family (see Appendix M for the associated coding generated at the familiarisation and coding stage of Framework Analysis).

Three sub-themes were generated: Emotional Loneliness, Social Loneliness, and Single Parenting.

6.3.2.1. Emotional Loneliness

Separation from the military family member, and the impact this had, was reported by participants. This isolation from others caused participants to experience emotional loneliness. Emotional loneliness is explained as a lack of personal connection to others and a lack of a confidante or trusting relationship (Campaign to End Loneliness, 2020).

Being on their own was particularly difficult for participants during separation. Not being together resulted in spending time alone, attending appointments they would have previously been accompanied to, and a change to the nature of communication. This also resulted in adjustments to the dynamics of participants' relationships (see also 6.3.4 Familial Relationships).

"You're always on your own and you know it's like you going to appointments and things" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

"I've struggled because I don't like my own company. Me and my husband kind of like, we're a bit sad, we like to be together, we very rarely argue, we spend a lot of time together... so we struggled with the separation, I did really, really struggle with it. Now we spend most of our nights on FaceTime" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

At the forefront of their experience of emotional loneliness during separation, was having no one to talk to. Participants were unable to discuss their dispersal experience or connect with others. This lack of communication, especially with the serving member of their family, had a negative impact on their experience of separation.

"The loneliness. You have your friends, but you can't, well you can speak to them but you can't speak to them in the same way as you would your husband" [P06, family of Officer (RAF), currently dispersed 1 year, prior experience of dispersal]

"I think I have found it difficult not living with my husband, more so not having people to talk, you know, having somebody to talk to on a night... it's lonely" [P03, family of Other Ranks (RAF), not currently dispersed, prior experience of dispersal]

In addition to the lack of face-to-face communication, a lack of physical human contact had a negative impact on participants. Physical comfort was acknowledged as directly affecting participants' psychological well-being. Emotional loneliness was greatest on days where physical comfort was not possible.

"I have down days ... I know it sounds silly but, I think if I was living with my parents it wouldn't be as bad because it's just the lack of human contact I guess" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"There are times, especially like, you know if you're just not feeling very well, and you sort of oh I just like a cuddle, he's not there, it doesn't happen very often but it's like if you've had a really stressful day at work, sometimes it's nice to come home and just have someone there to de-stress you or to bounce things off or if your excited about something, it's nice to go home and be excitable" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

In order to attempt to bridge this gap in face-to-face communication and contact with the serving member of their family, participants spoke of using technology and social media.

"Social media is great, I can send home videos of all sorts of thing but it's not actually the same as being there" [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

"I think we're lucky in the sense that we've got like FaceTime and Skype and which we do that like every day where I can" [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

"I've had a lot of experience of that, and we speak every day and now there's social media" [P14, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

Technology was often a tool utilised by participants to mitigate the effects of loneliness experienced by separation. This was most prominent for participants with previous experience of dispersal, or in the case of P11, those who had only ever lived dispersed. It took time to adjust to the changes around the nature of communication with the serving member of their family but, appeared to be highly beneficial in connecting dispersed families during separation periods.

6.3.2.2. Social Loneliness

In comparison to the focus on personal connections to the military family member in emotional loneliness, social loneliness focussed more on the absence of support networks and connection to the wider military community as defined by Campaign to End Loneliness (2020).

As discussed in 6.3.1 Identity, having no connection to the wider community during separation created social loneliness. Isolation from other military families and the absence of invites to events, further increased social loneliness and problems with feeling a sense of 'belonging' to a community (see also 6.3.5.2 Communities).

“There’s no contact for wives or anything to make connections and stuff like that. You never get invited to remembrance. If you want to attend a remembrance service and stuff like that” [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

“I’m not amongst my family and I’m not amongst known friends. I don’t know sometimes what’s normal” [P14, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

“I think when we were living when [SPOUSE] was based there, there were social events, the family’s days the ball, the Christmas draw. All that is lovely, but we don’t do that now cos again were not affiliated to {BASE} and {BASE} is too far” [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

Employed participants felt that going to work sometimes helped to alleviate social loneliness, ensuring they connected with others (see also 6.3.1.3 Independence).

“Sometimes work is quite nice because you don’t feel so isolated and I think that is the difficult balance I am finding at the moment” [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

Additionally, many participants highlighted the benefits of social media to establish connections and reduce loneliness. However, as with findings on emotional loneliness, social media could not replace face-to-face communication.

“Started following a couple of pages on Instagram of military families and I do kinda get a wee bit of comfort knowing that it’s not just me having a wobble today” [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

“I think there is a lot of sort of Facebook groups which I don’t really get involved with. I spend enough time on it without that as well as. To be honest I feel like it’s not the same, it’s not the same talking on social media with people than it is like having a coffee morning and having people around the house” [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

Loneliness can be buffered by connections. Whether this be adult connections, perhaps through work, or through the ability to concentrate on family members, such as children. However, for those with children, loneliness often appeared to be exacerbated.

“I find that if my wee one is in bed and you’re like just sat on yourself, you do, you get so lonely, it’s kind of it’s horrible” [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

“My kids are getting older; they don’t need me as much now. They come in from school and then go up to their rooms, so now there is a space and time I guess on an evening that wasn’t there before... I don’t know, I think it’s just a little bit like they’ve got to an age where we could just leave them and go out together but then he’s not there to do that now so I feel like I slightly got the benefit of them being a bit older and a bit more independent and then he’s not here for us to make the most of that” [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

When participants were able to focus their time on taking care of their children, they did not necessarily experience loneliness until they were in bed or their children were older. Spending time on their own in the home and not distracted by their children highlighted the separation from their spouse/partner, thus furthered feelings of loneliness. The evenings were cited as the worst time during separation.

Connection with others was important to the participants and a lack of this further highlighted social loneliness. To support dispersed families and combat this, participants suggested establishing a network of dispersed families to provide an opportunity to connect to each other. There was a desire for both virtual and local networks.

"I think it would be nice to have a bit of a network" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"I think that might be one area that could maybe be looked into whether they could be some kind of support network or network group connecting people who are in similar area in same situation for that bit of support" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

6.3.2.3. Single Parenting

Twenty-one participants had children under the age of 18 living in the same household. All of these participants described themselves as being a single parent during separation periods, regardless of demographics.

"You are a single parent through the week. Because I have to make sure the kids are fed, watered, shopping, bills are paid. I manage, everything, you know, I have to make sure that everything is done... I manage the bills; I manage the house" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"It's basically single parenting, it's just you know, he's never here for parents evening, he's never here for equipment, he's never here when you know the electricity fails in the house" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

"Kind of like a single parent at times to be honest like that's what's like" [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

Unsurprisingly, participants' lives revolved around their children prominently during separation. However, operating as a single parent left participants with little time for activities that may have helped improve their feelings of loneliness, sense of identity, or independence (see 6.3.1 Identity).

"My time goes on the kids; I don't really do anything through the week with my friends and stuff" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"I do get frustrated because it's like, I can't just walk away for half an hour, because I've got no one there to help my kids" [P17, spouse of Other Ranks (RNRM), currently dispersed 2 years, no prior experience of dispersal]

"You can feel a bit lonely and isolated living like this. I think again partly it may be to do with having, having kids... I don't have the chance to go out and do things for myself or maybe join a club or a running group or something where you would get that social interaction of your own... it can feel lonely when you keep turning up to parents evenings on your own... so you do feel conscious of the fact that you're on your own a lot" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

Participants found single parenting difficult, especially due to the increased isolation and the emotional loneliness from being separated from their spouse or partner.

“Life’s busy when you’re on your own with children and your husband’s away all the time” [P03, family of Other Ranks (RAF), not currently dispersed, prior experience of dispersal]

“It’s a challenge. You know, it’s a pretty significant challenge. I think operating as a solo parent is, is really tough. Erm, logistics are difficult. Just in this year, that you have to take on, you know with the house, the kids and everything else like work” [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

The impact of perceived single parenting on the military member of their family was also considered to be difficult.

“I feel like a single parent in the week really and it’s hard for him as well cos he feels kind of distant from the kids” [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

Separation was challenging for the whole dispersed family and some participants indicated the impact of changing parenting roles affected their relationship with military member of their family. Some participants felt as though they were in an unequal relationship due to the discrepancies in parenting (see also 6.3.4.1 Finding Relationship Balance).

“I think when he comes home at the weekends, he tries do as much as he possibly can. It does cause the occasional niggle cos I find it hard to switch from being 100% parent to having someone to share it with” [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

“It feels much more unequal because I’m doing all the child care on top of working and looking after the house where ... you know in the week essentially he is on his own and single and you know I’m not saying it’s not, it’s not hard in different way, but I think for me certainly it doesn’t feel as much of an equal way of living any more” [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

6.3.2.4. Theme Summary

Loneliness was as integral theme in participant narratives of dispersal. There were two distinct types of loneliness experienced by participants. Emotional loneliness was felt through the loss of contact with the military member of their family. The close relationship unit was challenged through difficulties communicating and a lack of physical comfort. Social loneliness was as a result of a lack of connection and support from social networks. Participants discussed the negative impact of not feeling as though they belonged to the military community. They tried to buffer the social loneliness through employments and connections. Loneliness appeared to be exacerbated for those with children. These participants discussed feeling as though they operated as a single parent during separation. The extra responsibilities as a result of this, and the reinforcement of separation from the military member of the family left many feeling as though they were in an unequal relationship due to the discrepancies in parenting. Participants suggests that a network should be established, either virtually or locally, to provide dispersed families with the opportunity to connect with each other.

6.3.3. Well-Being

The experiences of living separately from the military member of their family, appeared to have a substantial impact on the well-being of the participants. *“Well-being can be understood as how people feel and how they function, both on a personal and a social level, and how they evaluate their lives as a whole”* (New Economics Foundation, 2012, p. 6). Participant transcripts identified the impact of dispersal on stress, their outlook on this experience, and how they coped with separation (see Appendix N for the associated coding generated at the familiarisation and coding stage of Framework Analysis).

Three sub-themes were generated: Stress, ‘It is what it is’ Mentality, and Coping.

6.3.3.1. Stress

A prominent psychological impact of separation was stress. Participants discussed the consequences of this added stress across dispersal, particularly during separation periods. For some participants, the impact this had on their mental health was considerable, highlighting specific increases in anxiety and depression.

“I really struggled erm and I’ve suffered a bit with like mental health, like anxiety and stuff, so that really affected me so it’s been a little bit of an up and down like end of last year, but I feel better now. It’s just been a bit of a nightmare” [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

“Quite draining I would say... Sometimes it feels like a kind of temporary depression. Like you don’t want, sometimes you just don’t want to do anything, you can’t even face getting out of bed, you just, you don’t want to speak to anybody, you don’t want to see anyone bar him. You just, you just want to, want it to go by and them be home and then if he’s home there’s not, there’s not a problem, you’re happy. I would say it kind of a temporary depression you would get some days. It does take it kind of toll on you really” [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

Although addressed by most participants in some capacity, the impact on mental health was discussed more by participants who were family of military personnel of Other Ranks compared to those of Officers. Importantly, participants acknowledged the successive impact of stress and mental health on other aspects of their lives, such as employment.

“I’ve had depression and anxiety, what happens is, what I’ve realised now is I can’t deal with acute stress. As soon as I have that that’s when it just all goes to pieces. So that’s why I had to give up my job” [P14, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

For the majority of participants, finding stable employment was a significant benefit of dispersal, helping to create independence. However, P14 found that the impact of separation-related stress had on their mental health meant they had to give up their job as they were unable to cope (see also 6.3.3.3 Coping).

In addition to the impact of separation on mental health, almost all participants reported emotional difficulties as a result of stress. These were expressed in terms of dealing

with the emotional consequences of separation, finding life more difficult and experiencing a greater vulnerability to feeling sad.

"I think living as a dispersed family can be really difficult for people who weren't quite so well placed emotionally or again financially. I think it could be really difficult. It is definitely a challenge; you know it's tough its hard work but in terms of mental and emotional difficulties" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

"I think your emotions are a little bit more heightened when you know what I mean. When things are literally, you would get a little bit more upset quicker than you know what I mean" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

Primarily, participants reported being upset more often and found themselves getting upset quicker when the military member of their family was away. The change in emotional response to separation was more prominent during dispersal than it was when they lived together in the same family home.

"Mostly about time to go to sleep and I would think about him, because you're obviously not doing anything, I was like, only a couple of time remember it, so just crying in my sleep, like crying myself to sleep" [P22, family of Officer (Army), currently dispersed 4 years, prior experience of dispersal]

In addition to the impact stress had on mental health and emotions, participants indicated that their sleep was negatively affected and that they found the separation tiring. Worry about how the separation would impact the family and how participants would cope, was a prominent factor associated with the impact on their sleep.

"I mean I'm not depressed or anything, I'm not but certainly there is certainly stress, maybe not sleeping very well cos when he first went away, I didn't sleep for about a month cos I was just so worried about how it was all going to pan out, how it was affecting the children" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

Some participants acknowledged that stress as a result of separation was something that could be overcome or was just a part of dispersal (see also 6.3.3.2 'It is what it is' Mentality). However, for other participants, stress was an integral part of the challenges they faced as dispersed family.

"There is not one good thing that's happened in my life cos he's not here. And it makes my life more difficult. We've got more stress, less money and everything falls to me" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

The influx in responsibilities experienced as a direct result of the separation, for many participants, was hard to manage, thus exacerbating stress. Dispersal gave participants the opportunity for employment stability, but sacrifices were still made in order to establish a work/life balance, at least during the working week (see also 6.3.2.3 Single Parenting).

"I did get to a point where I thought I am really flogging myself here, you know it was really difficult to keep on top of everything, do everything I wanted to do and I just found I had no time for me at all" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

"Stress of having you know, everything crammed into a weekend or whatever is really hard" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

Findings indicated that stress was further affected by the intermittent nature of dispersal, not just the separation in general. Participants felt pressured to make substantial effort at the weekend when the military family member returned home to spend time as a whole family.

"Our weekends are really packed and really busy and there is a bit of pressure to try and manage that to make sure everybody gets, you know everybody wants a piece of him when he's home" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

"Extra pressures around the weekending but the weekend certainly made my life worse... the weekend he was due back you know, and it was just like this constant roller coaster of stress" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

"That sort of emotional stuff that they kind of try to park but you still got that for the whole week and then you come back and it's trying to fit it all in, so it is almost like a funnel you try and fit your whole life into a weekend" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

References to the extra pressures felt by participants when the military family member returned home (usually the weekend) was consistent across all participants regardless of demographics. Participants noted that the extra pressure left them feeling as though they were overcompensating for the time they spent separated. The stress of this intermittent separation had a big impact on the whole family and relationships, with a focus on the importance of family time.

"Personal relationships are difficult because you cram everything into a weekend which makes it much more stressful for the whole family. I think it puts stress on my husband because he is obviously driving there and back with all of that... that sort of emotional stuff that they kind of try to park but you still got that for the whole week and then you come back and it's trying to fit it all in so it is almost like a funnel you try and fit your whole life into a weekend" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

"There is a big pressure of coming home for a very short, condensed weekend and then away again... There is a huge time pressure in terms of family time, time spent together" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

In line with acknowledging the added stress the intermittent nature of dispersal had on participants, comparisons to deployments were made.

"Normally you, I felt when he's deployed you would get almost a peak where you feel like I can do this, this is ok and then they would be coming back and you think oh and you know it's a little bit of transition and then you can move on whereas this is like it literally is up and down every week" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

Participants highlighted how separation during dispersal was more difficult than when the military member of their family was away as a result of a deployment. Deployments are often abroad and are for a set period of time (e.g., 3-6 months) compared to the almost weekly separations of dispersal.

“Really difficult. It is much more difficult than a detachment and I think for the whole family it is much more difficult” [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

“I think it’s harder when he’s in the UK and for some reason he can’t come back cos you’re like, you’re actually in the same country. You’re actually here and you can’t come back, or I can’t get to see you, that makes it more frustrating and harder I think, then when he’s abroad somewhere and you just, you just know it’s not physically possible, it’s harder when he’s in the UK and you can’t get to each other” [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

6.3.3.2. *‘It is what it is’ Mentality*

Participants had an ‘it is what it is’ approach to their well-being as a result of dispersal. Any challenges faced due to separation were seen as just being part of the experience, or something that could be overcome. There appears to be minimal research exploring this phenomenon, but the phrase ‘it is what it is’ can indicate *“acceptance of complexity and ambiguity”* or *“acceptance of limitations”* (Gabora, 2014). This outlook on the dispersal experience was a thread throughout all participant narratives, regardless of the many challenges discussed and any participant demographics.

“You just do don’t you. Well, that’s just the situation so we’ll just get on with it” [P09, spouse of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

“That were the choice we made so we’ve, we’ve got to get on with it” [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

“You feel conscious of the fact that you’re there on your own a lot. But it’s just something you get on with” [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

“I guess there is just no right solution for military families. Someone is always going to lose out, whether it be me and my career, the kids, and their schooling or [MILITARY PERSON] not being with us as a family. There is always a compromise that has to be made by someone” [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

It was important for participants to focus on other aspects of family life in order to justify any potential challenges experienced as a result of separation. Specifically, participants with children felt that any negative aspects of separation, such as emotional loneliness, operating as single parent or not feeling a part of military community, could be persevered as long as the benefits outweighed the negatives for their children and families as whole.

“If I’ve got to live like this for the best of my kids, I’ll just have to grin and bear it” [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"We all have to do what is best for our families and yeah do what we can" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

For a considerable number of participants, focussing on the positive aspects of separation and the potential strengths gained from dispersal, aided their overall outlook of the experience. The challenging nature of dispersal was still acknowledged but participants appeared to view the positives, both immediate and long-term, as compensating for these challenges.

"Overall, it definitely works for us. It's definitely a good positive move for us. Even though it is quite a challenge" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

"It has it's challenges for sure but the way we look at it is it will have a longer-term benefit, so we kind of just suck it up just now and get on with it" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

This positive attitude towards separation helped participants to cope with the experience, potentially buffering the negative effects on well-being discussed previously (see also 6.3.3.1 Stress). Participants' felt psychologically stronger and identified personal growth as a result of working through the dispersal.

"I also know I'm a lot stronger than I give myself credit for because I do do it. Like a just get on and do it" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"You essentially think of yourself as single and if they're here great if they're not that's normal. The more you fight against that, I've had a lot of people say to me, 'oh that must be really hard', and I say to them, I used to go on and on about hard it was but I say now, I cannot think like that because as soon as I start thinking like that I become bitter and angry and resentful about how much is on my shoulders and how he just moves in and out" [P10, family of Other Ranks (RNRM), currently dispersed 3.25 years, no prior experience of dispersal]

Acknowledging that the dispersal and subsequent separation will end at some point, whether due to another posting or the end of the military persons career, strengthened participants' resolve.

"It isn't forever, so I think we've just got to try and look on that kind of side of it, it's just kind of what it is now" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"We know it's not forever. Had we known it's going to be longer then it would be different but you know it's two years and thankfully we have now had it confirmed it's coming to an ending in two years, but it can't come soon enough. But yeah, you just, you just cope with it, you've got to" [P17, family of Other Ranks (RNRM), currently dispersed 2 years, no prior experience of dispersal]

For others, acceptance of the separation after years of experience resulted in perceived ambivalence and acceptance to dispersal for the whole family.

"It used to be a choice but now I'm just, I think we've been through so many years now I'm just like whatever. Just you do what you have to do, just leave me here" [P06, family of Officer (RAF), currently dispersed 1-year, prior experience of dispersal]

"I think in many ways they have always been used to his absence. It is just the way it is" [P09, spouse of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

"The children kind of just got on with it. I think my daughter because she was so little, she was like three, when we did it. It's kind of been her norm cos she was so little, it's all she has ever known" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"I mean we just suck it up because he needs to come home when he needs to come home you know" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

"I found as I become more experienced that it is more of a choice but that's because I know from experience how rubbish it could be" [P10, family of Other Ranks (RNRM), currently dispersed 3.25 years, no prior experience of dispersal]

This outlook on dispersal, appears to aid participants in overcoming other consequences of separation such as mental and emotional health. It promotes independence and personal growth by pushing through the challenges and seeing results.

"It's an emotional roller coaster definitely... There's lots of tears, lots of tantrums, but then lots of laughs as well. It's one of these things where you just have to have your wee tears, have your wee upset, have your tantrum or whatever you're having. Depending on what it is that day you just have it get over it and then deal with what's happening. The best way to do it, have your wee break down and then pick yourself back up and just deal with what you've got basically" [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

"In a way knowing that you can cope, you can look after yourself and stuff like that and you're not the only one that's in this situation, so you know, yes you're having a bad day. But you know that ok, I've got to do this, and you get on and you do it" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

An 'it is what it is' mentality was prominent in participants' ability to adaptively cope with separation (see also 6.3.3.3 Coping).

6.3.3.3. Coping

Participants' well-being was affected by the way in which they were able to cope with dispersal. In order to cope with separation, participants employed both social and psychological mechanisms directly affecting their well-being. Participants relied a lot on their support networks and were cited as being integral in dealing with dispersal.

"I think you have to be quite a strong person to do it. I think you need to have a support network. If you just go it alone, I think it's really hard" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

"That's a godsend really" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Not having these support networks in place could make it harder to cope with separations. Support through the military community was often preferred as it provided a connection to others with a shared understanding (see also 6.3.1.2 Wider Understanding and 6.3.2.2 Social Loneliness).

"I think that is why a lot of military wives connect together, you know, because you understand me. Understand where I come from and that's why I've still got very good mates that are used to be or are still in the same vote but you know you can always phone them and have a moan cos they just get it, just get on with it, just don't worry but you know it hasn't changed... it's nice to know that you're not the only one" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

However, participants acknowledged that sometimes this connection with the wider military community only goes as far as shared experience of separation in general, not specifically dispersal. This can cause further issues in utilising support networks to cope.

"There isn't anybody else that I know in my friendship groups that have experienced this, but yet they have done the deployment and they get that bit but it's this kind of up and down bit at the weekends and the yeah having weeks of frustrations" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

Those participants that are able to connect with other military families and share the experience of separation still reported a disconnect and experienced frustration in the lack of understanding of the intermittent nature of dispersal. Despite being separated from the military member of their family, other military families often only had fixed-length deployments to compare to. The geographical nature of dispersal also left participants feeling separate from support (see also 6.3.2.2 Social Loneliness and 6.3.5 Accessing Support).

"I think just because I feel a bit out of the way and I feel that I miss that camaraderie of people" [P09, spouse of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

Regardless of their connection to the wider military community and other military families, participants were clear that this could not replace the loss of the military family member during separation.

"You know there's people there, you know I have got them but it's not the same as having your husband" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Due to the obstacles some participants found in connecting with a military-related support networks to cope with dispersal, participants' focus turned to their civilian counterparts. There were problems in forming relationships with civilians, particularly in the area in which they lived as civilians 'already have friends'. Participants experienced a disconnect with the civilian community, despite living there.

"I found that when I came here everybody's already got their own friends, they don't need another friend" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Of most importance was the difficulties participants faced in coping when support networks were not present. In these instances, participants utilised maladaptive coping mechanisms such as self-medicating:

"I couldn't deal with my family and for me I've got to prioritise my family. I've got to be well mentally, physically and you know I'm old enough now to see the signs but, I mean sometimes I don't cope with it very well and if I'm having you know bad times. You sort of compromise really, you like you self-medicate so you drink too much, you know you're not looking after yourself" [P14, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

Many participants looked to extra-curricular activities to help them cope with the separation when the military member of their family was away. This proactive coping strategy was designed to keep them occupied and their focus away from negative feelings. This also provided another opportunity for participants to develop independence and was good for their overall physical and mental health.

"I don't know whether it's stuff I would do anyway or whether I'm doing it to cope as a coping mechanism. Because when he is here, I certainly don't go to the gym as much and I don't do things independently as much" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

"I've got a few very good friends that I can speak to. Nothing to do with the military and that is really the sort of that's really important. Lots of exercise, lots of walking, lots of interests so I do lot of sewing. I help, I volunteer. My friends got a charity, so I work there. Just really try and be proactive. I like to be outside" [P14, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

This was not just important for the participants, but also for the whole family. For those with children, it was essential to find useful ways in which to help them cope and work through the potential challenges they experienced as a result of separation.

"It does put a lot of stress on her, she's only five so she doesn't really understand stressed out or how to deal with it so we do kind of have like nights where it's just me and her... just have a girly night and just chill, relax and unwind kind of thing." [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

As discussed in the loneliness theme (see 6.3.2.1 Emotional Loneliness), technology is often utilised by participants to bridge the gap in communication with the military family member. This has been identified as important part of coping with separation.

"I think we're lucky in the sense that we've got like FaceTime and Skype and we do that like every day where I can" [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

"Just keep busy, talk to friends, speak to him on the phone and just routine really" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

Technology is important in keeping the whole family connected and is beneficial in maintaining relationships (see also 6.3.4 Familial Relationships). Ultimately, the ability to adapt to any situation as a result of the separation was vital for participants, in order to cope effectively and avoid overloading responsibilities.

"You just have to cut some of it down, you can't be everything to everyone but then equally there's no one to share the load with, you get no truth of being everything to everybody" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

“He’s done a couple of different tours for long periods, so you get used to, then you have work to occupy you, but you know what I mean, you have, you get used to doing different things” [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

This importance of adapting throughout separation was discussed most by participants with prior experience of dispersal or those like P13 who had been living dispersed for over five years.

6.3.3.4. Theme Summary

Living separately from the military member of the family through dispersal, had a big impact on participants’ well-being. All participants reported stress across the separation period, affecting their mental health and emotional responses. The stress was difficult to manage due to the increase in responsibilities when the military member of the family was away. This was exacerbated by the intermittent nature of dispersal, with greater pressure placed on the weekend when they returned home. Relationships were affected and some participants articulated that experiencing operational deployments had been easier than living dispersed as it was a more stable separation. Regardless, participants approached dispersal with an ‘it is what it is’ mentality, focussing on the positive aspects and powering through for the benefit of the children. A positive outlook and years of dispersal experience created an ambivalence to the separation, but this did not help all participants to cope with the challenges of dispersal. Some maladaptive coping was reported. Support networks and a connection with the military community appeared to be key to coping.

6.3.4. Familial Relationships

Familial relationships with the military family member were substantially affected by separation (see Appendix O for the associated coding generated at the familiarisation and coding stage of Framework Analysis). Participants reported the importance of finding balance in their relationships and the challenges of this. Communication was a running tread throughout most themes but was integral in familial relationships. For participants with children, the relationship they had with the military parent fluctuated. Military parents often missed out on certain aspects of the children’s lives such as parents evening and sporting events, and it was perceived that separation caused the greatest unrest in younger children.

Three sub-themes were generated: Finding Relationship Balance, Communication and Military Parent and Child Relationships.

6.3.4.1. Finding Relationship Balance

For participants, dispersal primarily took the form of weekendening. This aspect of the separation was the focus of the transcripts for many participants when trying to find

balance in familial relationships. There appeared to be a delicate balance between giving enough time to their relationship and reconnecting the family as whole whilst taking time to relax and enjoy the weekend. Readjusting to their relationship dynamics, that change from separation to reunion, was a challenge.

"I think for us then him not getting home until really late on a Friday night has a knock-on effect of the whole kind of 48 hrs that you've got together" [P03, family of Other Ranks (RAF), not currently dispersed 1.5 years, prior experience of dispersal]

"He's been overseas a lot, so he hasn't been around at weekends that's... I just feel like its family stuff doesn't happen as much" [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

A great deal of pressure was felt on the weekends when the military family member was due to be home and this increased when they were unable to return. The majority of the military family members would return to work Sunday evenings or Monday mornings, and as a result, most participants cited Sunday evenings as the most difficult time of dispersal for the whole family.

"We do, we try and cram a lot in to the weekends but it does make the relationship, it can cause a bit of friction for sure as well" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

"Sunday nights were awful. They would be in tears when he left and that was tough it was really tough" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

"That was difficult for him and it was obviously difficult being in that situation myself. Sunday we'd just end up arguing because he was anxious and taking everything out on me or he'd be really upset" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

Family life was often concentrated into the weekend. The military member of the family was often described as being tired when they returned home. This made it difficult for participants to find the right balance between spending time with one another, giving each other space to recuperate, and enjoy the weekend.

"He wasn't getting home till midnight on a Friday night and then he was having to leave them on a Sunday night, so it was quite hard because he was tired but still trying to do everything. We weren't able to make the most of the time that we had" [P03, family of Other Ranks (RAF), not currently dispersed, prior experience of dispersal]

"It's nice to see him but he's always knackered and I'm always very conscious that I don't place any expectations on him" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

Adjustments constantly needed to be made and negotiations of roles and responsibilities were required throughout dispersal. When the military family member left, certain responsibilities were taken up by the stay at-home family. Upon the return of the military family member, there was often an expectation that everything would resume the way they left it, but family life continued without them. The responsibilities they initially had were no longer theirs.

"He comes home and says, 'oh I'll sort out the insurance' and finds out that I've done it, he's just like oh, I'm not part of that am I not. ... It can be house insurance, car insurance things that I'm used to managing and juggling and then when he comes back and tries to take them off me, he can't because I've done them or won't because why do you need to. You know he's supposed to find his role but then equally I can't pretend I've not been independent; you know what I mean" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

"I find it hard to switch from being 100% parent to having someone to share it with. And sometimes he gets a bit, 'look you know, let me do it'. I think he feels like I'm going to take over but so that's kind of tricky at times" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

This renegotiation was difficult for all family members and could cause problems within familial relationships. One participant in particular highlighted the unequal nature of their relationship with the military member of their family and how this has occurred since having children:

"I think when we were two adults on our own, I think there was an equilibrium in it. We both were doing our work thing in the week we were able to do our hobbies, see our friends, it was much more equal because we were both doing our sort of choice of career, I suppose... Now it feels much more unequal because I'm doing all the childcare on top of working and looking after the house" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

The renegotiation of roles and responsibilities during dispersal were compared to those experiences through fixed-length deployments. Participants found challenges were exacerbated by the repeated separations unique to dispersal.

"I am used to taking on the sort of the responsibilities when my husband's away... for a period of time what happens I think is that renegotiation of roles is happening every weekend as opposed to happening at the R & R point and then happening at the end of the time away, so it is really disruptive. That sound really horrible but it is really disruptive to have that almost reengagement/disengagement pattern that goes through period of time and I think the longer it goes on the more stressful it actually became which wasn't the normal feeling. Normally, when he's deployed you would get almost a peak where you feel like I can do this, this is ok and then they would be coming back and you think oh and you know it's a little bit of transition and then you can move on whereas this is like it literally is up and down every week" [P01, family of Officer (Army), currently dispersed, no prior experience of dispersal]

Over time, participants adapted to the intermittent separation of dispersal and the impact this had on their familial relationships. The military family member leaving (primarily) during the working week and returning at home on a weekend became routine for the whole family.

"They're kind of used to it. They are a bit thrown off if he's on duty and he doesn't come home at a weekend, there a bit like, oh this is a bit of an odd weekend. But they're used to the weekends. Monday to Friday we've got us routines this is what we do. Monday to Friday that's our routine" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"We're very lucky I say, because it's 5 years now, you know, it's just our routine it's what we're used to" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

"I think this way, although daddy is not here in the week, there is a minimal level of upheaval for him" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

With this experience, participants learned the importance of spending valuable time together as a family. Despite the challenges faced compressing family time into the weekends, it was invaluable.

"When we see each other we really do spend a lot of valuable time together. We go walking, we have lots of shared hobbies and we make the most of our time rather than just festering which potentially we would if we just saw each other all the time" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

"I make sure all the boys get to see him and do things with him and at the same time have to try and make sure he and I get to see each other, which is really difficult when he is only home for a short period of time" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

For some of the participants who were parents, the focus of this family time was on ensuring the children had sufficient time with the military parent. However, this meant that the participants felt their own quality time with the military family member was minimal, affecting their relationship.

"I think our own relationship we spend less time on that because there's only two days and there's only so much you can do. By the time you've done all the things that need to be done, you know spent the family time, you then have to fit in other family, you know wider family and by the time you have done all of that there is not that much you know there's a limited amount of time left. I think that is definitely the case that we have spent less time on, on us as a couple" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

"He and I are aware that we need to make an effort to make a point of doing things together... we think it's important. You know we need our relationship to work. You know for the whole family unit to work" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

In general, the focus of participants' narratives was on trying to find a balance. However, a few participants reported negative feelings regarding their relationship with the military member of their family as a result of the separation (see also 6.3.2.1 Emotional Loneliness).

"I think that, that's the worst thing... when you've decided that you want to spend the rest of your life with somebody and they're just not kind of there" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

"We were a lot closer when we spent time together, because you know you can lean on each other. But you can't have that closeness and connection when someone's not available to you... I think we just feel disconnected like you have to disconnect from your relationship in order to survive a bit" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

"There has been a bit more resentment I think from me and I think I didn't necessarily expect that I suppose having done it for so long" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

6.3.4.2. Communication

Communication was key in familial relationships during dispersal. Some participants found that communication improved during separation whereas others reported a certain level of conflict. Technology was cited as an important tool in preserving familial relationships (see also 6.3.2.1 Emotional Loneliness).

"I think you spend more quality time when you see each other. It probably forces us to be better communicators over the phone" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

The visual nature of some methods of communication helped to negate the impact of no face-to-face contact.

"Now with communications, fantastic, you know so it doesn't feel as bad when they're away sort of thing cos you can talk to them a lot" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

"I mean the good thing is now with the current modern age, lot of communication tools, we at least once a day most days, sometimes a bit more than that, you know, he might phone earlier to speak to him and then I'll speak to him you know probably like later and we generally FaceTime because it's a bit more interactive" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

"We struggled with the separation; I did really, really struggle with it. Now we spend most of our nights on FaceTime" [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

These visual tools also enhanced interactions between the military parent and children as they were able to share with them aspects of their work and environment, keeping them involved in each other's day-to-day lives.

"This is good for the kids at night so they can see him. Sometimes he will be out on an aircraft and he can show them, look this is what I'm flying in so that is quite nice for them as well. Oh yeah it definitely helps massively" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

However, for some participants, utilising technology did not help communication with the military family member. Conflicts arose due to difficulties experienced in communication that were not present prior to dispersal. Technology could not replace face-to-face contact.

"I think there has been a lot of tears, there has been a lot of frustration. I think we have had quite a lot of arguments actually, which normally we would work and the system would be the frustration not the relationship and I think that does put a strain on relationships because you're not able to have that ability to communicate how frustrating the problem is because there are there is an annoyance that that person is not there" [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

"If something happens and you want to be able to discuss it. It's harder to talk on the phone than it is to talk when he comes home at night and we can sit and have a cup of tea and talk about what's bothering us, that's hard" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

"I think, I think it has affected our relationship in a certain way because if you obviously don't stand as much time with somebody you aren't going to be as close to them" [P22, family of Officer (Army), currently dispersed 4 years, prior experience of dispersal]

6.3.4.3. *Military Parent and Child Relationship*

Participants with children discussed the familial relationship between the military parent and child during separation. It was clear from all narratives that children spent a lot of time missing their military parent and that their absence had an impact on many aspects of their lives.

"I think to be honest the kids not having their dad there would be the biggest thing for me. That they don't get to see him. I think they don't really understand what he does there is a whole chunk of his life that they don't. I mean every kid; they probably don't spend a lot of time thinking about it but yeah I think that's the hardest" [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

She doesn't understand why dad wasn't at school with her. She'd FaceTime him, she was at the school gate and she was walking in and then she didn't know why dad couldn't be there and she kept saying to him, 'why you not here, why you not here. [FRIEND]'s dad is here" [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

Participants reported that the military parent missed out on events in the children's lives. This was as a result of the separation from the family. Both prior work commitments and being geographically separate made it difficult for the military parent to return and attend certain events. This is something that was reflected on by participants and the military parent.

"I think we're very mindful of the fact that he is away a lot and that the boys do miss out and he doesn't necessarily come to their sports day and parent's evenings, this that and the other" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

Missing key events and moments of importance for children was perceived as putting strain on the relationships between the children and military parent. Participants reported a disconnect between the two and acknowledged the military parent could feel distant from the children.

"It's hard for him as well cos he feels kind of distant from the kids" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

"Things that happen at school or they've done something really exciting. It kind of gets lost by the time he comes home at the weekend... He might say 'oh I heard you did this or that' and their like yeah whatever, because he wasn't there in the moment" [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

The intermittent nature of the separation often made it difficult for the children to comprehend what was happening on a daily basis. Participants reported a lot of confusion around why and when the military parent would leave the family home and how difficult this was for the children to understand.

“It has made it a wee bit difficult especially when she can’t understand what’s going on as much or why he’s away all the time and why daddy goes away and then he comes back and then he goes away again. I think the difficult part is just kind of explaining to her and making her understand [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

“To me it seems quite disruptive for a child in that they don’t know what to expect, like they don’t know when they go to sleep whether daddy will be there the next morning or when they go, so they must be sort of on edge all the time” [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

The difficulties that arose with the parental separation focussed on the children’s emotional ability to understand. Many of the participants with children described some typical behaviour of their children as a direct result of the military parent being away. This was sometimes difficult to manage for the ‘lone’ parent at home (see also 6.3.2.3 Single Parenting).

“There was a lot of tears... The little one in particular, didn’t want me, he wanted daddy and he had a meltdown. I want daddy, I want daddy and it was heart-breaking because daddy’s not hear there’s nothing I can do about it. So, I would say well phone daddy on Skype and daddy would be in work trying to find a quiet room to kind of solve the melt down... They do miss him and that has made me question the decision a bit” [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

“She was three going on four and she was quite a difficult child and him being away really affected her. My son became very withdrawn and quiet, didn’t make any progress at school. We had Child Psychologist look to him and they said his mind is so full of his dad that he can’t move on” [P14, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

The outward emotional responses to the military parent varied for all children of participants. Although the majority of these emotional responses were from younger children (< 5 years old), it was clear that the children’s behaviour changed as they developed. See quote from P12 as an example of the changing behaviour of their child toward the military parent as a result of separation:

“In the last, I guess the last 3 or 4 months, the first sort of phase I suppose of him reacting to it, he started to give [MILITARY PARENT] the cold shoulder when he came home on a Friday and he wouldn’t engage with him to start. He would sort of look in the other direction and also when he came on FaceTime, he wouldn’t talk to him or you know interact with him, he kind of sort of looked in the other direction and gave him the back of his head.

The last couple of weeks he has started at the weekend being very, very clingy to [MILITARY PARENT]. When [MILITARY PARENT] goes out of the room, he will cry. He wants to know where he is all the time, and he gets sort of visibly upset by it. He is also looking on a Monday going round the house looking for [MILITARY PARENT] where he would normally find him asking, saying DaDa, DaDa

He’s beginning to you know, I guess it’s the mental development, to react and to miss him in a way that he didn’t a few months ago” [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

Age appeared to be an important factor when considering the impact of separation on children’s relationship with their military parent. Participants highlighted big differences in responses from older children compared to younger children.

“The youngest misses his dad a lot but, the eldest is ‘oh yeah, it’s alright, I’ve got freedom, dad’s not home” [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

“When they were younger it was hard cos you felt like they were missing out as a family unit” [P06, family of Officer (RAF), currently dispersed 1-year, prior experience of dispersal]

“The children are older now so my husband will call, and they’re not always interested” [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

Age reduced outward emotional responses to the military parent, thus changing the nature of their relationship. Dispersal experience did not appear to have as big of an impact on these familial relationships as age.

As a result of some of the emotional difficulties children faced due to parental separation, participants suggested that events connecting children to other dispersed children might help. Due to the nature of dispersal, families are often separated from the military community and other dispersed families. Children may not know any other children in similar situations, utilising shared experiences was suggested as a way to make them *“feel a little bit normal”* and help them cope with parental separation.

“Even for the children as well, it would be good for the kids to be able to meet other kids that have military parents” [P04, spouse of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

“So, having something that [CHILD] could go to with other children that were going through the same thing that she was. Just to have that support. If [CHILD] ever does anything now, it’s with me. So, it having that where she can go with other children where she might not be going round to their house to tea where mum and dad are together and she seen the perfect family image, but understanding that this is our normal and it’s ok for us to be like this and it’s ok for you to feel like maybe struggling without dad because there’s other children that are going through the same thing. Cos she is only six-year-old, so it’s a lot for her to try and understand, whereas if she sees other children, doing the same thing while they’re away from their mum or their dad then it might feel a little bit normal for her and easier for her to cope with” [P18, spouse of Other ranks (RNRM), currently dispersed 8 years, no prior experience of dispersal]

6.3.4.4. Theme Summary

Familial relationships were affected by separation. It was important for participants to find a balance between weekend activities, maintaining relationships and finding time to relax. The weekends (or when the military member of the family returned home) was the most challenging period of the dispersal. The impact of the condensed time to spend together was felt by spouses/partners and children. Adjustments to the roles and responsibilities each time they were separated and reunited was difficult, especially when the military family member had expectations that everything was as they left it. However, for some participants the repeated separations and reunions became part of a routine. Communication using technology was an important tool in maintaining familial relationships during separation. Although interactive methods of communication such as video calls enhanced military parents’ relationships with their children, participants

reported that technology could not replace face-to-face contact. Children spent a lot of time missing the military parent, especially when they missed out on key events such as sports days. The intermittent nature of dispersal caused confusion for younger children and many had negative emotional reactions to the military parent upon reunions. Older children appeared to show more acceptance to the separation. Participants suggested creating events to connect children to other dispersed children might help them cope with the separation.

6.3.5. Accessing Support

Access to support was critical for participants during separation, from support services to support networks (see Appendix P for the associated coding generated at the familiarisation and coding stage of Framework Analysis). Support was also often referred to when discussing independence, social loneliness, and coping with separation.

Military families are able to access a number of resources for support, however, participants explored how this was different for dispersed families, the impact the separation had on accessing support, the role of communities, and the importance of shared experience. Finally, participants provided suggestions as to what support could be put in place to better assist dispersed military families.

Two sub-themes were generated: Support Services and Communities.

6.3.5.1. Support Services

When discussing the availability of support services for military families, participants highlighted a disconnect. This disconnect was between support accessible by families that live on or near military bases and support for dispersed military families. Participants did not feel as though they were able to receive the same support as other families, leaving them at a disadvantage.

“There are stresses and strains that come from being dispersed and it’s not that you’re wanting special treatment. You just want to be giving the same access to facilities and services that you are when you are in a regiment or you’re somewhere static” [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

“The worst thing is that you don’t have the community we don’t get any welfare, which is wrong. You’re supposed to get the welfare that package that all spouses get” [P04, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

“Until recently I wasn’t allowed to join the Facebook pages for any of the patches around [LOCATION], yet the Welfare Services, a lot of their advertising is done on the patch pages, so you’re effectively excluding x% of your people because there all living in their own house” [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

This disparity in support was exacerbated due the geographical distance of most participants from any service provision. Military welfare is primarily located on military bases, however, participants indicated that they were only able to access the welfare associated with the base the military member of their family was posted to. This was highly impractical for most participants as they lived hundreds of miles away from where the military family member worked.

“It was all civilian we were miles away from anything military” [P03, family of Other Ranks (RAF), not currently dispersed 1.5 years, prior experience of dispersal]

“There is so much goes off in your local welfare. That’s the downside, you don’t have your welfare support... when I lived on camp I could just nip over the road and speak to my Welfare Officer” [P04, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

“I had a dependant’s card that would get me on to any base in the UK but now you would have a dependants card which only gives you access to the base that your spouse is serving at” [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

Welfare was not seen as being inclusive as the support services focussed on those living on or near military bases. For some participants this contributed to the disconnect with the wider military community, their identity as a military family and contradicts recent initiatives that are perceived to encourage dispersal (see 1.5.4 Future Accommodation Model Pilot and 6.3.1 Identity).

“There was no support. There was no support when we lived off base... It’s like where do you actually belong” [P06, family of Officer (RAF), currently dispersed 1 year, prior experience of dispersal]

“It’s supposed to be open to everybody but seemed to me to not be very inclusive. They had a family’s day down here in the dockyard this weekend and that was only for people who were based on ships and I think well what about everybody else. The way the Navy oversees its facilities to families is based on where your partner is based. So, you can only access, for example, the sport facilities if you’re in one of the bases on each side of the water or you live in SFA. You’ve got all these dispersed families living in the area who effectively are cut off from accessing the bases and accessing all the facilities, which seems again slightly at odds with the fact that you’re trying to encourage people to settle and buy a house” [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

When participants were able to access support services through welfare, they did not feel as though their experiences as dispersed families were valued. No follow-ups or further support was provided.

“No, they don’t think to include me in meaningful ways. They’ll ask me questions that might sound meaningful but then like I said there’s no meaningful follow up” [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

“I think for me the big thing is the lack of appreciation and acknowledgment of it in the support provisions that exist. And the kind of needs addressed I guess [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

In addition to military welfare services, support services provided by other organisations such as the Family Federations and third sector charities were primarily centred on

families with children. Participants with no children felt excluded from the support and those who were not married were unsure of their eligibility to access support.

"I did go back to the centre, but it was all very focused on supporting mothers and children. Children rather than wives. So, I didn't engage in that again... It feels as a someone who doesn't have children that I'm excluded from that part of the support. It's not just that I don't have children, but I can't have children. It feels sometimes when you're in these groups that you've made a life choice they don't agree with and actually where's the empathy for the people who can't have children" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

"I was like, am I a family because I don't have a child. So, I think there is that type. But also, cos we are not married I think that makes it difficult cos I think when you're just a girlfriend you feel a bit different and I think that's where the lack of support from the military side of things" [P04, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Participants noted that they were often not informed of the services or events that they were able to access as a dispersed family living away from a military base.

"You do kinda feel you have been left out. But I would definitely say there is no information for resources, for erm families that live out of camp. None whatsoever. You don't really hear much at all" [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

"I've had these conversations with people before where they'll maybe have like family days but people that don't live there don't get informed" [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

"We're not invited to events when we're not connected to camps. Like at the moment I'm not connected to a camp" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

Many participants also reported that they did not know who to contact if they needed help or what support services were available to them.

"I have an office number for my husband that is obviously his desk other than that I have no contact details... if he isn't available, I don't know who I contact" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

"I don't even know what would be out there for our wee one like if she needed support like I no idea for that at all. Like I feel there is no one to tell us what we can do or like what support or where we would report to to get that" [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

"I know there is the Families Federation, I don't know what I would approach them for, I don't, I haven't felt the need to reach out for support, so I haven't looked at what is there. I don't know much about what they offer mainly" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

"I don't even know who the Welfare Officer is" [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

Participants with a military background, especially those who were also veterans, appeared to be more knowledgeable about the support available to them.

"I think that maybe because I've been part of this community for so long now. It's just second nature. But if your new coming into, you probably don't know that so it's just being aware that it's there" [P06, family of Officer (RAF), currently dispersed 1-year, prior experience of dispersal]

"I'm not the sort of person to not ask for help if we need it. I know I always make sure I know all the detail that I do need to know" [P03, family of Other Ranks (RAF), not currently dispersed 1.5 years, prior experience of dispersal]

"Having a background of, having lived on base in quarters, known about the Hives I think helps" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

Social media was also an informative tool and participants that utilised this to connect with military groups were similarly more knowledgeable, at least in terms of knowing who to ask for support.

"I'm on married unaccompanied site on Facebook. There is lots of information on there. Passing this on... Did you know these rules have changed and you can now get this, you can get, you know? There is so much information I think for wives there doing it for themselves" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

"I think it's social media that's made you made more aware of what's there" [P06, family of Officer (RAF), currently dispersed 1-year, prior experience of dispersal]

Regardless of the availability of support for dispersed military families, a few participants indicated that if they needed support it is important that they reach out for this. They felt the ownership of accessing services was on the individual and should not rely on others to contact them.

"I think there is a whole load of support now. Things are accessible if you ask for it. It's not going to come to you, you do have to ask for it and it is there" [P06, family of Officer (RAF), currently dispersed 1-year, prior experience of dispersal]

"People will always help you if you ask. I think you have to ask and say, the thing I can't deal with, can somebody help. Generally, there is somebody that will, but you have to ask" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

Dispersed families do not often live near the military base which the military member of their family is posted to. Consequently, these families are unable to access any support available there due to their geographical distance. Participants discussed the difficulties they faced in accessing support such as welfare on bases and suggested allowing dispersed families to access their local military bases. This recommendation was to ensure a bridging in the disconnect participants felt to the military community and allow them to connect with welfare and other military families. It was acknowledged that this may only be beneficial for dispersed families who live near a military base. Participants were also keen for a greater engagement with military welfare in general.

"Maybe some kind of scope for some kind of local visiting, you know local to the station. It could also like families to access the station and be more part of the community" [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

"Things that may be could be better... I know families who you know they're fairly close to the base, but they can't access that base cos their husband is posted somewhere else" [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

“A bit more welfare involvement would be nice, because like I say, although I’m married unaccompanied the welfare, well my husband’s unit is in [PLACE], it’s not anywhere near me. I haven’t heard from them, they haven’t reached out to me, not that there’s a lot that they can do... but yeah it would be nice to know that there is one. The welfare where I am, are located, they just sort of brush me aside now because my husband isn’t part of the unit. So, I’m nothing to do with them anymore” [P23, spouse of Other Ranks (Army), currently dispersed 3 months, prior experience of dispersal]

In addition to the need to access local bases and military welfare, participants described a need for greater information in general for dispersed military families. External support services are also available for dispersed military families; however, this was not always communicated with participants.

“You get lots of different advice that’s the other thing, there is no one point of contact that says ok your partner is away we’re going to look after you but yet the soldier gets that and that’s really difficult” [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

“On the MOD website wherever it is, if there is a bit about families and army life, if it could acknowledge it from the civilian side that would be, would have been very useful” [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

“It might be that there are lines of communications, but I just don’t know them and I’m not on them, but yeah, I think they are running events. I just don’t know about them until after they’ve happened. And I would be interested in travelling to them” [P24, family of Officer (RNRM), currently dispersed 2 years, no prior experience of dispersal]

6.3.5.2. Communities

Aside from support services, communities were at the centre of the support participants relied on during separation. It was important to build a network in order to support themselves and their families.

“I couldn’t do it if I didn’t have it. If I was on my own, if I felt that I didn’t have anyone to call on if I had a disaster, I don’t think I could do it” [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

However, in obtaining these support networks, participants realised they were often too dispersed from the military community, geographically, to connect. This was particularly significant for participants who had prior experience of living in military accommodation on or near military bases. These participants missed these connections they had previously relied on during separations as a result of the dispersal

“It is a challenge it is hard choosing to be, to operate on your own and try and give everything you want to do. I think the main thing you really miss out on is the sort of the RAF, the military community network around you, having a network of like-minded people” [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

“I think as time has gone on I started to miss the patch life, miss the people getting your situation, having a husband whose now been away quite a lot in the last 6 months” [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

“Suppose it would have been different if I’d moved to you know to military town or something like that, stayed within that community. The people would understand but I

find it hard here being you know, being here that there is no connection” [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

A number of participants did not live near any extended family. This meant that their networks were developed with a focus on friendships, both military and civilian, to provide support.

“I feel I have my own support network around me cos ultimately, there is no family anywhere here” [P02, spouse of Officer (RAF), currently dispersed 5 years, prior experience of dispersal]

“My support mechanism is through friends I’ve known here for a long time and through, we’ve got a network of military wives’ choirs” [P06, family of Officer (RAF), currently dispersed 1 year, prior experience of dispersal]

A need to build friendship networks meant a reliance on civilian communities due to the location of where participants lived. However, developing these with civilians was challenging and often participants compared this to friendships with those in the wider military community.

“You know I found that when I came here everybody’s already got their own friends, they don’t need another friend. Whereas when you move into another Army community and other pads like area, people are in the same situation as you, so there somebody else needs to make friends, they know that you need to be friends. They see you and they know, so people go out of their way to welcome you in, because they know that your somebody new” [P04, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

“It is civilian friends and you do find that when, well or I found at least it takes a lot longer to build those relationships. It just isn’t quite the same. Not necessarily in a bad way, but it does take longer, it is a bit more tricky” [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

In part, further difficulties arose with civilians due to a perceived lack of understanding of military families in general, but more specifically the nature of dispersal and separations.

I don’t think they like understand much, they kind of... They’re not really kind of interested in it also, I probably don’t have the kind of same rapport with them. I also don’t have, I can probably count on one hand the amount, this is really bad, but I can count on one hand the amount of friends that I have, you know locally” [P04, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

“Obviously my friends that’s [FAMILY MEMBER] in the Army, they obviously got it, but I think my friends who were just civilian. I don’t think they really understood what it was like” [P22, family of Officer (Army), currently dispersed 4 years, prior experience of dispersal]

“I find people that I work with don’t understand, ‘but you’re married and he’s away?’... yeah, that’s a normal military life, but civilians don’t understand it. It’s very hard to explain some things to some people you know what I mean, and they just look at you as if you’ve lost the plot so I think that is why a lot of military wives connect together, you know, because you understand me, understand where I come from [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

Specifically, participants reported repeated misunderstandings from the civilian community regarding what it means to be a dispersed military family. These

misunderstandings often meant that civilians did not fully understand the intermittent nature of the separations and therefore the impact of this on participants' lives.

"I don't think they have any concept of how difficult we tend to live. They understand deployment because you know that's a long time, but they don't think this is a problem, they think this is quite nice actually. You get to do what you want to do in the week, and he comes home at the weekend and you have a really lovely time" [P19, family of Other Ranks (RNRM), currently dispersed 12 years, prior experience of dispersal]

I think the only thing they understand is that he's away. They don't understand like how, lack of contact and then sometimes a lot of contact" [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

"Just little things like that people probably don't realise how important the weekends are for you" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

On the other hand, participants who had always lived dispersed and had never experienced living in military accommodation on or near military bases, found it difficult to connect with other military families. Participants found it difficult to share with military families, as they did not share experiences. They sometimes found that those from the military community made assumptions about their lives before they could try to engage with them.

"I guess wives that have left their career and followed the Army path ... yeah I guess they were difficult to confide in because I didn't want to insult them by saying well, I want to stick to my career. I didn't want them to think I was belittling their choices which I'm not, it's just everyone's, each to their own. So, they have got lovely families and stuff it's just again that balance. Sometimes they say 'oh you could just follow him, I'm sure you could get a job down here'" [P08, family of Officer (Army), currently dispersed 6 years, no prior experience of dispersal]

"A lot of people don't think that were married when we go to mess do's, they don't think were married because we don't live on the patch. Then they say if you're not married then you're not really relevant because you don't really get a say. You can only get a say if you're married. Because like if you're married you only get married quarters, your only counted as a couple if you're married, things like that" [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

A smaller number of participants who had previously lived in the military community also reported a lack of understanding from other military families. There was often a focus of dispersal being a choice and that this then justified any challenges participants may have experienced. Participants did not feel that their reasons for being dispersed were understood.

"I think there is a lack of acknowledgement as well sometimes within the military community that it's a choice you know, moving around is also a choice because people don't have to do that" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

"I think there is still a lot of people in military, perhaps the older guard who think that wives, families should just follow their husbands around ... maybe someone may want a career or that the kids don't want to keep changing schools and it's not good for them" [P07, family of Officer (RAF), currently dispersed 1.25 years, prior experience of dispersal]

Additionally, only a small minority of participants knew of other dispersed military families. The majority did not know anyone who was also living dispersed.

"No, we don't really know anybody whose living, living life like us" [P20, family of Other Ranks (Army), currently dispersed 7 years, no prior experience of dispersal]

"I guess now I am much better plugged in to the Navy welfare systems than I did, I was beforehand, I wasn't really that tapped into any of that, but I would say there's not many people who have a similar background" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

Ultimately, participants were in agreement that unless you have experienced something similar to dispersal, it is difficult to fully comprehend the impact. Having shared experience was ideal when creating support networks that participants felt they could utilise.

"I think a lot of people who don't live in a kind of dispersed way don't really understand both within the military community but also the broader you know generally kind of community, you know" [P12, family of Officer (RNRM), currently dispersed 11 years, no prior experience of dispersal]

"I think other people don't get and always kind of a 'oh well you knew what you were getting into' and I'm really like I've heard that so many times before like I know but like nothing can kind of prepare you for how you are going to feel like I knew what was going to happen but I never knew it was going to be so hard" [P11, family of Other Ranks (Army), currently dispersed 3 years, no prior experience of dispersal]

"Unless you've lived it and like it's your lived experience. I don't think that you could ever like fully get it" [P27, family of Other Ranks (Army), not currently dispersed, no prior experience of dispersal]

Consequently, the best support was reported to be from those with shared experience of dispersal, not just military-specific dispersal but anyone who had experienced work-related separation. A few participants had already found these connections, others highlighted a desire to.

"I have a support mechanism round here with people who are in other similar situations" [P06, family of Officer (RAF), currently dispersed 1-year, prior experience of dispersal]

"I think a lot of my friends in [LOCATION], are civilian friends because most of their husbands work on the Riggs, so I think they understand a lot more cos their husbands' away for three or four weeks at a time, then he's back two to three weeks and they understand exactly where you're coming from" [P13, family of Other Ranks (RNRM), currently dispersed 5 years, no prior experience of dispersal]

"I guess even if it was just meeting somebody who had a partner that worked away during the week and they live separately, cos there are so many different jobs that people can do that doesn't have to be the military" [P26, family of Other Ranks (Army), currently dispersed 5 years, no prior experience of dispersal]

Being able to connect with other people in similar situations was something many participants sought. This shared connection was thought to be beneficial, providing support to participants. Many participants did not have access to such support networks, consequently, many proposed that the promotion of such connections to other dispersed families would be welcomed. Connections to other military dispersed families were the

focus of these suggestions despite previous conversations highlighting the benefits of connecting with anyone (including civilian families) who had experienced work-related family separation.

“I think mainly having contact with other people who are going through something similar would help. Because there isn’t anybody else that I know in my friendship groups that have experienced this but yet they have done the deployment and they get that bit but it’s this kind of up and down bit at the weekends and the yeah having weeks of frustrations” [P01, family of Officer (Army), currently dispersed 9 months, no prior experience of dispersal]

“There isn’t any overarching thing that kind of targets, that I know of anyway, that’s targeting people who are out and trying to get them together or link people together who may be linked a little bit nearer to each other geographically” [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

In order to promote these connections, participants suggested the use of technology. Social media sites, online registration and apps were among the proposed ideas.

“Being able to speak to other people with the same experience. I know that the RAF Families Federation have the dispersed Facebook but a more Tri-Service view of that as well. A lot of RAF families are dispersed but there are also a lot of Army families and Navy families tend to do the ‘weekending’ thing. So, having that sort of connection, whether that be on social media or whether it’s little groups across the country or something but that kind of network” [P05, family of Officer (RAF), currently dispersed 5 years, no prior experience of dispersal]

“Maybe it would be nice to be able to register on some kind of base, to find out how many other people live near you but are in a similar situation. That would be quite useful” [P09, family of Officer (Army), currently dispersed 5 years, prior experience of dispersal]

“Some kind of app where military people, doesn’t just have to be navy, can join up and say look I’m here is there anyone else around me, would anyone else like to meet. That’s part of the military family and maybe there’s sub-groups of whatever like sub-groups of ships. That would be brilliant because immediately there is going to be an understanding of family comes before everything else because you just don’t see your family very often” [P10, family of Other Ranks (RNRM), currently dispersed 3.25 years, no prior experience of dispersal]

6.3.5.3. Theme Summary

Participants’ access to support appeared highly dependent upon how connected they felt to the community and their understanding of what support services were available. They did not feel as though they were treated as, or entitled to, the same support as other military families. Military welfare was primarily located on military bases and some participants did not find this support physically accessible or inclusive. For those without children this was especially true, as support was reported as often focussing on parents and children. A military background or having lived on a military base before dispersal, appeared to increase the likelihood that participants knew that support was available, but many reported that they did not know who to contact. Communities were at the centre of support for participants during separation, but again the geographical distance caused problems in connecting with others. Consequently, participants relied on civilian communities to provide social support. Unfortunately, many reported a lack of

understanding and further difficulties in connecting to others. Similar experiences were reported with the military community, particularly for those who had never lived on base. Only a small minority of participants knew of other dispersed families. Nevertheless, all participants acknowledged the benefit of connecting with other dispersed families, military or civilian. Participants suggested that dispersed families should be allowed access to their local military bases (for those that live nearby) and that opportunities to connect with other dispersed families via social media or online should be promoted.

6.4. Outcomes and Recommendations from Interviews

Phase 2 provided primary research findings on the psychological and social impact of separation for dispersed military families. The main findings considered identity, loneliness, well-being, familial relationships, and accessing support. Each of these main themes overlapped with each other, impressing on the importance of considering psychological and social aspects together.

At the centre of these findings were the challenges participants faced. The focus of these were primarily on the perceived view of dispersed military families by civilian and military communities and a persistent lack of understanding. This in turn had a substantial impact on how participants viewed themselves and how they accessed support. Participants' ability to cope with separation was critically linked to their outlook on the dispersal. An 'it is what it is' mentality was highly common among participants, an acceptance of their situation, or a positive outlook helped to alleviate some of the negative consequences of separation along with appropriate support networks. Despite this, participants were clear that dispersal was challenging, and this was exacerbated by the intermittent nature of the separation.

Throughout the interviews, participants suggested ideas for support for dispersed families. It was important to explore participants' opinions on the support they would find beneficial as ultimately, they would be the ones to access it in the future. The recommendations as a result of the Phase 2 findings focus on greater inclusion of dispersed military families in military community, greater access to information and support and raising awareness.

Recommendation: Outreach from military welfare to establish contact with dispersed military families and provide information and support.

Recommendation: Provide access or at least a point of contact at local bases, relative to the location of the dispersed family as well as the base at which their military family member is posted.

Recommendation: Create greater connections with other dispersed families through social media and localised 'meet-ups' for adults and children.

Recommendation: More accessible information is needed for dispersed military families, detailing what they are entitled to in terms of support and how/where they can access this.

Recommendation: Greater awareness and acknowledgement is needed regarding the dispersed military families - what dispersal is, the impact of the separation and explore how to support the families.

6.5. Chapter Summary

This chapter presented the research methods and findings for Phase 2.

Twenty-eight interviews were carried out with civilian spouses, partners, and children of UK dispersed military families. Participant recruitment was primarily through social media, employing opportunity and snowball sampling. Interviews were recorded and transcribed before being analysed using Framework Analysis.

Framework Analysis generated five main themes: Identity, Loneliness, Well-Being, Familial Relationships, and Accessing Support. Each of these themes was discussed with sub-themes and supported by quotes from participants. Throughout the findings, participant recommendations for support for dispersed military families were reported and summarised.

Chapter 7. Discussion

7.1. Chapter Overview

Chapter 7 will summarise and critically discuss the findings from Phase 1 and Phase 2 of the project. By integrating the findings from both phases, six overarching concepts will be discussed. These concepts help in developing an understanding of the psychological and social impact of intermittent separation on dispersed military families. These findings will be discussed in terms of existing theories and research. The strength and limitations of this research will be reported alongside an overview of recommendations for policy and practice, and suggestions for future research. Finally, a reflective summary and the original contribution to knowledge is reported.

7.2. Overview of Project

UK initiatives and military surveys indicated a change in the way military families live, encouraging stability and increasing flexibility. A large number of families are already estimated to be living dispersed from the military member of their family. Frequent separations and regular relocations make military families distinct from other families (Palmer, 2008). This is more evident in dispersed military families who often experience separation and reintegration of the military member of their family at recurring intervals.

Despite a great interest in researching the lives of military families and the significance of dispersal in this population, little research has explored dispersed military families. Research has predominately focussed on the impact of operational deployment on families of military personnel (e.g. Riggs & Riggs, 2011; Rossetto, 2015; Thandi et al., 2017; White et al., 2011). In order to understand the experiences of dispersed military families, a mixed methods explanatory sequential design was carried out over two phases. The aim was to explore the psychological and social impact of intermittent separation on dispersed military families.

Phase 1 analysis of secondary data provided a baseline understanding of what was already known. Firstly, a systematic narrative literature review (Phase 1a) was carried out to identify the impact of separation on military families. The review findings indicated that military families experienced changes in their psychological well-being during military-induced separations with specific increases in stress, depression, and anxiety symptoms. Communication and relationships were also affected, but social support could mitigate the psychological effects of separations. Higher levels of social support were significantly associated with better psychological health, fewer depressive symptoms, and lower levels of stress. Secondly, exploratory geospatial analysis was conducted to ascertain if there was a suitable dataset to act as a proxy for the geolocation of dispersed military families (Phase 1b). The data analysis indicated that there was no

publicly available dataset currently exists that could act as a suitable proxy for the geolocation of dispersed military families due to the number of limitations on the data.

Phase 2 supplied primary research findings through semi-structured interviews with 28 civilian spouses, partners, and children of dispersed UK military personnel. Participants reported that separation had an impact on the identity, levels of loneliness (both emotional and social) and their overall well-being. The extent to which participants coped with dispersal was dependent upon their perceived connection to the military community, social networks, and available support. Relationships between the dispersed family and the military member of their family were affected. Throughout the narratives, it was clear that the intermittent nature of dispersed exacerbated the challenges participants experienced through dispersal. A positive outlook, prior dispersal experience and fostering independence helped to buffer this to a certain extent.

Combined, the findings from both phases begin to shape an understanding of the psychological and social impact intermittent separation can have on dispersed military families. Consequently, six overarching concepts will be discussed: Military Identity, Loneliness, Stability and Dispersal, Psychological Well-Being, Resilience and Coping and Social Support.

7.3. Military Identity

From the primary research in Phase 2, it was clear that identity was central to the dispersal experience. The way in which dispersed military families identified themselves between civilian and military communities had further consequences for the way in which they experienced separation. Despite often describing themselves as a 'military family' it was clear from the interviews that most participants did not feel as though they were a part of the military community. There was often a desire to be a part of the military community, but this disconnect was exacerbated by the geographically distant nature of dispersal - not living on or near military bases and thus the community.

7.3.1. Social Identity Theory

Social Identity Theory (Tajfel, 1981; Tajfel & Turner, 1979) posits that a person's sense of who they are is based on social group memberships such as social class, family, or sports teams. Group membership gives a sense of social identity and thus sense of belonging to the social world. Social identity theory emphasises the psychological motivations that lead to the endorsement or disfavour of group membership (Huddy, 2001). Tajfel and Turner (1979) proposed three mental processes involved in evaluating a social identity: social categorisation, social identification, and social comparison.

Categorising people and oneself into social groupings is based on the normal cognitive tendency to group things together, highlighting differences between groups and

similarities within groups (Tajfel, 1981). Group association provides information about those involved and oneself in terms of defining appropriate behaviour and aiding the understanding of the social environment. During social identification, the identity of the group is adopted with emotional significance. It is argued that self-esteem is tied to group membership. Finally, once categorised and identified with a group, comparisons are made to other groups. To maintain self-esteem, the identified group should be viewed more favourably to others. In other words, it is important “*to differentiate their own groups positively from others to achieve a positive social identity*” (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987, p. 42).

Therefore, dispersed military families are categorised as a distinct group within military families and identified through geographical separation from the military family member. Discrepancies in support available to military families living on-base compared to dispersed military families, reinforced the disconnect with the wider military community and thus how they viewed their ‘military identity’. In terms of social identity theory, problems arose at the social comparison stage where dispersed families felt they were at a disadvantage compared to other military families. This inter-group conflict caused further problems in a collective identity and subsequent ‘competition’ for resources and support.

A later advancement of social identity theory was self-categorization theory (Turner et al., 1987). This was developed as a ‘*cognitive elaboration*’ of social identity theory, exploring how individuals identify with a group and how they become activated in a situation. Self-categorisation theory concentrates on the cognitive underpinning of social identity, where self-categorisation is a cognitive factor that promotes group membership. Category salience is thought to shape identity, where increasing the salience of group membership strengthens the association with the group (Hogg & Turner, 1985; Huddy, 2001; Mullen, Brown, & Smith, 1992). Consequently, a salient identity is “*one which is functioning psychologically to increase the influence of one’s membership in that group on perception and behaviour*” (Oakes, 1987, p. 118).

The classic view of categories assumes a defined set of rules or features that someone associates with for group membership. However, work by Lakoff (2008) proposed a ‘prototype theory’ where categories are more probabilistic in structure and members are rated in terms of their similarity to the most typical member. A prototype or typical member is someone that embodies the most common characteristics shared among group members (Rosch & Lloyd, 1978). It is this similarity to the groups’ member prototype that helps determine the creation and development of social identity (McGarty, Turner, Hogg, David, & Wetherell, 1992; Turner et al., 1987).

It is this prototypic approach to categories that helps to explain some of the difficulties dispersed families had regarding their 'military identity'. Due to the very nature of being a family member of someone who is in the military allows them to align with the identity of a military family. However, due to living geographically dispersed from not only the military person, but also often the wider military community, this group association was lessened. Only one paper in Phase 1a systematic narrative review considered dispersed military families, but Verey and Fossey (2013) did report a vulnerability to a loss of identity as a result of moving to live off-base, geographically dispersed. Self-categorisation researchers stated that categories are "*intrinsically variable and fluid, not merely being passively 'activated' but actively constructed 'on the spot' to reflect the contemporary properties of self and others*" (Haslam, Turner, Oakes, McGarty, & Hayes, 1992, p. 5). Group prototypes vary dependent upon the social setting, thus membership to a group is strengthened when the label amplifies the similarities with other group members (Turner et al., 1987).

In an attempt to ascertain the most fitting theory to explain this study's findings on identity, Identity Theory (McCall & Simmons, 1978; Stryker, 1968) was also considered. Identity theory is a micro-sociological theory that explains role-related behaviours, compared to social identity theory explaining groups processes and intergroup relations (Hogg, Terry, & White, 1995). There are many similarities between these two theories. Both consider the social nature of identity in terms of society rather than independent of and both acknowledge that multiple identities can exist and are influenced by experiences and behaviours (Hogg et al., 1995).

However, identity theory does not focus on the cognitive processes of identity, whereas social identity theory, as a psychological theory, explores socio-cognitive processes. Stets and Burke (2000, p. 234) suggested "*differences originated in a view of the group as the basis for identity (who one is) held by social identity theory and in a view of the role as a basis for identity (what one does) held by identity theory*" (Thoits & Vishup, 1997). Consequently, social identity theory helped to better explain the fluid nature of group membership that dispersed military families appeared to experience with a military identity, due to situational settings.

7.3.2. *Military Ethnic Identity*

Sociological research has explored how individual military identities are established by and within military institutions and cultures (Cooper, Caddick, Godier, Cooper, & Fossey, 2016; Higate & Cameron, 2006; Woodward & Neil Jenkins, 2011). To further understand how dispersed military families come to identify with being a military family and how this identity shifts, it was important to consider work by Daley (1999). Interestingly, Daley (1999) explored the possibility of a Military Ethnic Identity. When

joining the military, there are certain factors that a newcomer focuses on, learning the language, the appropriate behaviour, focussing on the new job, getting to know military neighbours and socialising. These are all acculturation efforts and are extended to family members. The families begin to meet other military families and begin to feel part of a new society. As the whole family adapts to this new ethnic identity, their social circle begins to closely revolve around other military families. Daley (1999) further suggests that overtime, through multiple re-postings, "*civilian friends seem transitory and the constancy of the military becomes the core support system*" (p. 298). The similarities in experiences makes it easier for military families to connect with each other rather than local civilians. This is the case for both adults and children who no longer need to explain their experiences and can instantly relate to other military families and children.

At the core of this identity appears to be the military support system. For dispersed families who have either moved away from or have never lived on-base, this core support system was arguably weaker. The primary findings from this PhD research indicate that a lack of connection to the military community and thus this military support network, created challenges for dispersed military families when assessing the extent to which they compared with the prototypic category of a military family. This appears to be situational where there are shifts in identity. Participants in Phase 2 reported identifying as a military family but were quick to pull away from an association to the military community despite a desire to be more connected. For example, when in situations where identifying as a military family was more 'favourable', such as military-related events like family days or Armistice Day, participants' membership to this identity was greater. However, when residing within a civilian community it was essential for participants to have an identity beyond being a military spouse or partner. In these situations, such as, at work or picking up children from school, participants ascribed more to their work role or as a single parent.

Beyond Daley's work on the military ethnic identity, research on identity in the military population has primarily focussed on military personnel, not the families. The identity theories here help to explain the identity fluctuation in dispersed military families, but also help the understanding of how a military family identity is established. It is proposed that future research should aim to explore this fluctuation in greater detail. A longitudinal study would allow for the assessment of a 'military identity' during separation and then upon reunions dispersed military families. Daley (1999) created a Military Identity Assessment Scale, but this does not appear to have been validated.

The emergence of a military ethnic identity was in relation to social work for military families (Daley, 1999; Munson & Daley, 2013). The development and impact of this identity on families was reported as essential when providing support. The fluid identity

of dispersed military families discovered in this PhD research should be taken into account when any future services or changes in policy are considered for dispersed military families. By understanding this unique and shifting concept of identity of dispersed military families, information can be targeted more effectively, particularly in terms of inclusion and the language used.

7.4. Loneliness

The difficulties experienced in establishing a stable, positive social identity often created a further disconnection to the military community and also the civilian community. Consequently, loneliness was a commonly reported experience for dispersed military families. This again, was a key finding through the primary research in Phase 2 and was not reported as part of the literature review in Phase 1a.

Loneliness has been considered as a perceived lack of personal relationships and according to the Campaign to End Loneliness (2020), in the UK, loneliness is generally defined as *“a subjective and unwelcome feeling which results from a mismatch in the quality and quantity of social relationships we have and those that we desire.”* In line with the Cognitive Discrepancy Model (Perlman & Peplau, 1982, 1998), loneliness is a subjective, unpleasant, and distressing phenomenon experienced when there is a discrepancy between the interpersonal interactions desired and those actually experienced.

This incongruity is often associated with certain life factors, for example, poor health has been found to impact an individual's ability to maintain typical social interactions (Burholt & Scharf, 2014). Experiencing loneliness has been associated with factors related to military experiences, particularly with veterans, such as increased number of transitions, military-related trauma, physical health, and losing touch with other members of the military community (Kiernan et al., 2018; Wilson, Hill, & Kiernan, 2018; Wilson, Leslie, McGill, & Kiernan, 2019).

By adjusting or achieving the quality and frequency of social interactions, feelings of loneliness may be avoided. However, any discrepancy in desired and actual interactions does not directly lead to loneliness, cognitive processes may modify this experience (Burholt, Windle, Morgan, & Team, 2017). There are two perspectives to loneliness: a Deficit Perspective and a Cognitive Perspective (see Dykstra & Fokkema, 2007).

The deficit perspective focusses on loneliness as a result of relationships within social networks lacking in regard to a persons' needs for intimacy or companionship. The cognitive perspective of the Cognitive Discrepancy theory focusses on the psychological process that mediate between social interactions and experiences of loneliness (Perlman & Peplau, 1982). Expectations and preferences of interpersonal relationships

are considered and centres on the extent to which actual relationships meet these. Labelling, causal attributions, social comparisons, and perceived control were reported to potentially influence the experience of loneliness. Phase 2 participants had a desire to be a part of the military community and felt disconnected to this, social loneliness was particularly prominent in participants narratives when the connection to others they felt were missing was due to their expectation that they should exist.

The deficit perspective of the cognitive discrepancy model of loneliness appears to be the most appropriate approach to explain the loneliness found in dispersed military families. More specifically, a greater focus was placed on emotional loneliness in Phase 2 findings.

R. S. Weiss (1973) distinguished between two types of loneliness in the absence of certain types of relationships: the loneliness of social isolation and the loneliness of emotional isolation. Social loneliness has been defined by the absence of a social network such as friends, family or community (Campaign to End Loneliness, 2020). Research with married women experiencing social loneliness found that, regardless of the sense of security found in their marriage, they lacked a wider group of friends to achieve a sense of belonging, of companionship, and of being a member of a community (R. S. Weiss, 1973). Emotional loneliness has been linked to a lack of personal connection to others, a lack of a confidante or trusting relationship regardless of a good social network (Campaign to End Loneliness, 2020). R. S. Weiss (1973) considered single parents, primarily those that had ended a marriage, and found that they experienced emotional loneliness due to not having someone to rely on. Furthermore, existing relationships within social networks were insufficient to combat loneliness in the absence of a spouse or partner.

Participants in Phase 2 experienced both social and emotional loneliness and this distinction was reported in the interview findings (see 6.3.2 Loneliness). Emotional loneliness was characterised by the lack of connection specifically with the military member of the family. Not having their partner or spouse to rely on or to attend appointments that they would have previously been accompanied to, highlighted participants' emotional loneliness. For those with children, this was most evident with missed sports days and parents' evenings. Experiencing emotional loneliness had further consequences on familial relationships, particularly with extra pressure to reunite when the military family member returned home (see 6.3.4.1 Finding Relationship Balance). This potential disconnect between emotional loneliness experienced during separation, and the pressure to negate this upon reunion, was difficult for participants. Participants were primarily spouses and partners of the military family member and it

was clear that emotional loneliness potentially created a dissatisfaction with their relationships.

The systematic narrative review findings from Phase 1a supported this potential consequence of emotional loneliness, indicating a decline in relationship and marital satisfaction during military-related separation (Andres, 2014; Meadows, Tanielian, et al., 2016). Knobloch et al. (2016) explained changes in relationship satisfaction across a military-related separation period as a result of the difficulties experienced with communication and in placing extra time and energy into rebuilding connections the military family member upon reunions. This is potentially exacerbated by emotional loneliness. Due to the participants in Phase 2 being primarily spouses and partners of the military family member, it is difficult to determine the extent of emotional loneliness experienced by children. However, it was clear that the children found separation difficult and often had negative emotional responses when attempts to connect with the military parent were made, both during separation and upon reunion (see 6.3.4.3 Military Parent and Child Relationship).

In addition to the lack of connection to the military family member, participants reported that, similarly to R. S. Weiss (1973), social networks and connections with friends and family were not sufficient to replace the loss of the military family member or to combat the emotional loneliness experienced. Participants in Phase 2 acknowledged attempts to combat this through technology, and increasing communication, but that this could not replace face-to-face communication and physical contact. Gambardella (2008) reported that in a relationship, couples may rely on each other for support, companionship, and security. These factors work together to create stability at home and removing a person from this unit may shift the balance.

Findings from Phase 2 characterised social loneliness by the absence of support networks and a connection to the wider military community. Social networks were discussed in greater terms regarding accessing support and the extent to which they felt part of a community, rather than specifically in relation to feelings of loneliness (see 7.3 Military Identity and 7.8 Social Support). Nevertheless, experience of social loneliness highlighted the disconnect participants had to both civilian and military communities. Between this and emotional loneliness, participants strived for independence (see 6.3.1.3 Independence).

The degree to which social loneliness is experienced has been suggested to be associated with the size of the social networks available (Dykstra & Fokkema, 2007). People with relatively small social networks are more likely to experience social loneliness. Whereas research has indicated that emotional loneliness is most common among people who have experienced relationship separation such as divorce (Dykstra

& Fokkema, 2007; R. S. Weiss, 1973). In terms of dispersed military families, the primary findings indicated that social and emotional loneliness are not mutually exclusive. Participants reported living in civilian communities, with small social networks often disconnected from the military community and also experienced separation for their spouse or partner. Findings indicate a potential fluctuation, particularly in emotional loneliness, across the dispersal period.

The frequency, duration and intensity can have an impact on consequences of loneliness. Intense feelings of loneliness over a short period of time may provide motivation to connect with other people, however when feelings of loneliness remain overtime, this can inhibit social connections and cause a negative effect on mental and physical health (Cacioppo, Grippo, London, Goossens, & Cacioppo, 2015; Qualter et al., 2015; van Dulmen & Goossens, 2013).

Across the lifespan, loneliness is often a transient experience, with no long-term effects (Qualter et al., 2015). According to Evolutionary Theory of Loneliness, this is due in part to the feelings of loneliness motivating a reconnection with other people (Cacioppo et al., 2015). However, in the case of dispersed military families, this motivation was not always present. For many participants in Phase 2, experiencing emotional loneliness was not reduced through an increase in communication with the military family member. Further problems were experienced in connecting with social networks due to challenges connecting with the military community and finding a stable identity (see 7.3 Military Identity).

Campaign to End Loneliness (2020) suggested that identifying loneliness as emotional or social is beneficial, *“but it is more realistic to think of it in terms of a spectrum, where the lack of more emotionally significant relationships has a bigger impact than the lack of less significant relationships”* (p. 11). A deficit in each type of relationship is thought to lead to varied levels of distress. Emotional loneliness has been found to be more acutely painful with feelings of depression, whereas social loneliness has been explained as a mixture of feeling rejection and boredom with links to feelings of anxiety (Rainer & Martin, 2013; D. Russell, Cutrona, Rose, & Yurko, 1984).

It is not clear what happens when loneliness is experienced repeatedly such as for dispersed military families. Further research is needed in the area of loneliness to fully understand the impact of intermittent separation experienced through dispersal. To gain a better understanding of the experiences of loneliness for dispersed military families, theories more specific to separation should be considered, such as Ambiguous Loss and Boundary Ambiguity (see 2.6.2).

Ambiguous Loss, characterised by uncertainty, can be experienced throughout dispersal due to the intermittent separation and this can leave a paradox of absence and presence (Boss, 2006). There are two states to ambiguous loss: ambiguous absence where the family member is physically absent but psychologically present and ambiguous presence where the family member is physically present but psychologically absent (Boss, 2002, 2004, 2006). Throughout military-induced separations and reunions, military families experience ambiguous absence and ambiguous presence consecutively. This discrepancy in physical and psychological presence across the dispersal may help to explain emotional loneliness experienced by dispersed military families.

Ambiguous loss can lead to boundary ambiguity around the roles and responsibilities of family members. The extent to which dispersed military families experience emotional loneliness can perhaps be determined by how open or closed these family boundaries are. Research indicated that families who keep their boundaries partially closed, amending responsibilities whilst maintaining relationships during separation, cope well (Hill, 1949). If dispersed military families do not adjust their expectations in accordance with the intermittent separation, they are more likely to experience emotional loneliness. Acknowledging that when the military family member is away, certain roles and responsibilities are adopted by others and that these are resumed upon the military family members return should result in positive coping.

There has been an acknowledgment that loneliness is an area of importance for military families in general, but specifically those living geographically dispersed. Since 2019, a question on loneliness has been included on the Tri-Service Families Continuous Attitude Survey, with results indicating that at least 17% of the military spouses felt lonely often or always and 61% felt lonely occasionally or sometimes (see MOD, 2019f; MOD, 2020g). The Armed Forces Covenant Annual Report (MOD, 2019a) stated that this information will contribute to a better understanding of the prevalence of loneliness, and any factors that may be contribute to a change in risk.

7.5. Stability and Dispersal

Stability has been found to be a reason for, and a consequence of, geographical dispersal. Although not directly discussed in the Phase 2 interview findings, participants did consider the impact of dispersal on their stability. Participants in Phase 2 highlighted that dispersal allowed them to control and stabilise their family life, where the only inconsistent aspect was the military service member due to the intermittent separation. Family structure and stability has been found to have wide ranging impacts on child outcomes from cognitive, behavioural and health domains (Craigie, Brooks-Gunn, & Waldfogel, 2012).

The importance of creating stability was at the centre of UK initiatives regarding military families. The Strategic Defence and Security Review (Cabinet Office, 2010, 2015) acknowledged the re-housing of military families from overseas military bases in Germany back to the UK. Rodrigues et al. (2020) reported that since this announcement, there has been a notable influx in the number of military families living in England, with particular clusters around military bases. UK initiatives, such as the Armed Forces Families' Strategy (MOD, 2016c), have since recognized that adjustments need to be made in order to remove any disadvantage. The priorities of greatest interest included partner employment, accommodation, children's education and childcare, community support, specialist support, health and well-being and transition. Consequently, the Future Accommodation Model Pilot (MOD, 2020c) was introduced, with the specific purpose to increase stability and offer greater flexibility to military families' accommodation options.

Research has indicated that this shift in focus to stability has resulted in greater numbers of military families choosing to live dispersed. Since 2011, data has indicated that beyond the commuting distance to military bases, military families have become increasing more distributed across England (Rodrigues et al., 2020). Forces Help to Buy Scheme and 'Get You Home Travel' Funding (MOD, 2020d) have continued to encourage home ownership, increasing the flexibility of location in which military families may reside. Thus, increasing the number of dispersed military families.

Publicly available datasets were considered in Phase 1b in an attempt to identify a proxy variable for the geolocation of dispersed military families. Identifying an appropriate dataset would have provided more information as to the geographical and social implications of military families' residing locations. Rodrigues et al. (2020) utilised Service Child Pupil Premium data to demonstrate the changing distribution of military families in general across England. However, in Phase 1b, this dataset was not found to be suitable as a proxy for dispersed military families alone. A lack of suitable proxy variable for dispersed military families makes it difficult to explore the implications dispersal may have on the resources available in residing communities, especially pertaining to support, resources and school places. House of Commons Defence Committee (2019) acknowledged that dispersal reduces military families' ability to access support and that resources and services are not currently adapted to support these families living away from military bases. However, Future Accommodation Model Pilot aims to address this.

The minimal research on dispersed military families has explored potential reasons for a move towards dispersal and away from a military lifestyle. This research has consistently highlighted stability as a primary reason for dispersal (AFF, 2016a; Gribble & Fear, 2019;

RAF Families Federation, 2019a; Verey & Fossey, 2013). Only one paper in Phase 1a systematic narrative review considered dispersed military families (Verey & Fossey, 2013). This stability covered many areas of dispersed military family life including children's education, spouse/partner employment, and housing (Gribble & Fear, 2019; RAF Families Federation, 2019a). Furthermore, for military children, the presence of the non-military parent at home also provided stability within the family home as well as reliable and consistent support (Gribble & Fear, 2019).

A desire for stability gave rise to independence, although for those with children it led to feeling as though they were a single parent during the separation period. Similar findings were reported Gribble and Fear (2019), where naval family members experienced this independence during the separation period and felt they had to make a conscious effort to include the military family member in parenting decisions to avoid potential conflicts.

Additionally, an 'it is was it is' mentality reported in Phase 2, contributed to the acceptance of dispersal as participants acknowledged the benefits of stability caused through dispersal. Ultimately, participants reported that dispersal ensured that everything in their life remained stable apart from the military family member leaving and returning. This was in comparison to living with the military family member and following to each posting. In this case, many aspects of their lives were in a state of fluctuation, housing, employment, education as well as separations. The benefits of stability were much more prominent in transcripts from participants who had previously lived in military accommodation and who could draw comparisons to a mobile lifestyle. The RAF Families Federation (2019a) also reported that those living in military accommodation experienced less stability than those in private accommodation. However, it is important to acknowledge that the dispersed military families in this research were defined by the distance at which they lived away from the military base the military member of their family was based (greater than 10 miles), and not necessarily separated in the same way as the dispersed military families defined within this research project.

Phase 2 participants also acknowledged the importance of finding balance in their familial relationships and some challenges that a need for stability caused. This was particularly prominent for those with children. However, for many participants, the stability gained from dispersal was enough to accept the other challenges they faced.

Research has indicated that stability is often referred to as a positive consequence of dispersal and that the nature of family stability is important for child outcomes. However, the specific effects of stability within a dispersed military family setting are not fully known. Findings are often inferred to be a result of the stability experienced through dispersal; this has not been explicitly researched.

7.6. Psychological Well-being

Both primary and secondary research in this study has shown a strong indication that psychological well-being is affected by military-related separation. There has been no consensus on a single definition of well-being, however, there appears to be an agreement that well-being at least includes the presence of positive emotions (e.g. happiness), the absence of negative emotions (e.g. depression and anxiety), satisfaction with life, fulfilment and positive functioning (Andrews & Withey, 2012; Diener, 2000; Diener, Scollon, & Lucas, 2009; Huppert, 2009; Ryff & Keyes, 1995; Veenhoven, 2008).

7.6.1. Six Factor Model of Well-Being

Social scientists have extensively studied subjective well-being, with a key focus on life satisfaction, happiness, and positive affect. However, this research did not consider theoretical underpinnings, thus neglecting aspects of positive psychological functioning (Ryff, 2014; Ryff & Singer, 2006). Consequently, Ryff (1989) proposed a theory-based empirical approach to what it means to be mentally healthy: a Six Factor Model of Well-Being (Ryff, 1989; Ryff & Keyes, 1995). According to this model psychological well-being consists of self-acceptance, environmental mastery, purpose in life, positive relations with others, personal growth, and autonomy. Each of these were considered theoretical constructs that relate to different aspects of positive functioning.

In Phase 1a, Knobloch et al. (2016), credited deployment with personal growth where military family members could cultivate their skill, talent and autonomy. Similarly, findings from Phase 2 indicated that dispersal fostered independence and gave participants more responsibilities. Furthermore, participants reported the importance of the opportunity dispersal gave them for stable employment and potential careers. Paid employment has been found to be critical to well-being, particularly in relation to providing access to needed resources as well as promoting meaning and purpose (Warr, 2003).

Only one paper in Phase 1a findings directly measured the level of well-being during separation (Padden et al., 2011). The well-being of the spouses of military family members was not associated with any sociodemographic variables, including rank. Findings on well-being from Phase 2 supported this, where no differences across demographics were found. Interestingly, Padden et al. (2011) reported that those who had prior military experience, such as growing up in a military family, had significantly higher well-being than those who did not. This suggested that experience may have an impact on well-being of military families. Similar findings were not reported in Phase 2 regarding well-being; however, it was clear that prior military experience rendered participants more knowledgeable about support available to them (see 6.3.5.1).

The six-factor model of well-being aids in understanding the functioning of military families during military-related separation and helps to determine what psychological well-being is, however of greater interest was the factors that may influence this. Findings from Phase 1a and Phase 2 indicate complex interactions between psychological and social aspects in determining well-being. Phase 1a primarily considered papers that contributed to or were as a result of psychological well-being and similar results from Phase 2 were reported. Well-being can be understood in terms of how people feel and function, on a personal and a social level, as well as how they evaluate their lives as a whole (New Economics Foundation, 2012).

7.6.2. Dynamic Model of Well-Being

Stoll, Michaelson, and Seaford (2012) highlighted the importance of separating the concept of well-being from what drives or influences it. What influences well-being can be divided into external factors (e.g., income, housing, education, social networks) and internal factors (e.g. health, optimism, self-esteem), these all influence how people feel and function. To account for this distinction between what well-being is and what influences it, S. Thompson and Marks (2008) developed the Dynamic Model of Well-Being (Figure 12).

The model describes how external conditions act together with internal/personal resources. This contributes to good functioning and therefore good feelings in day-to-day interactions. Functioning well and experiencing positive emotions was described as 'flourishing'.

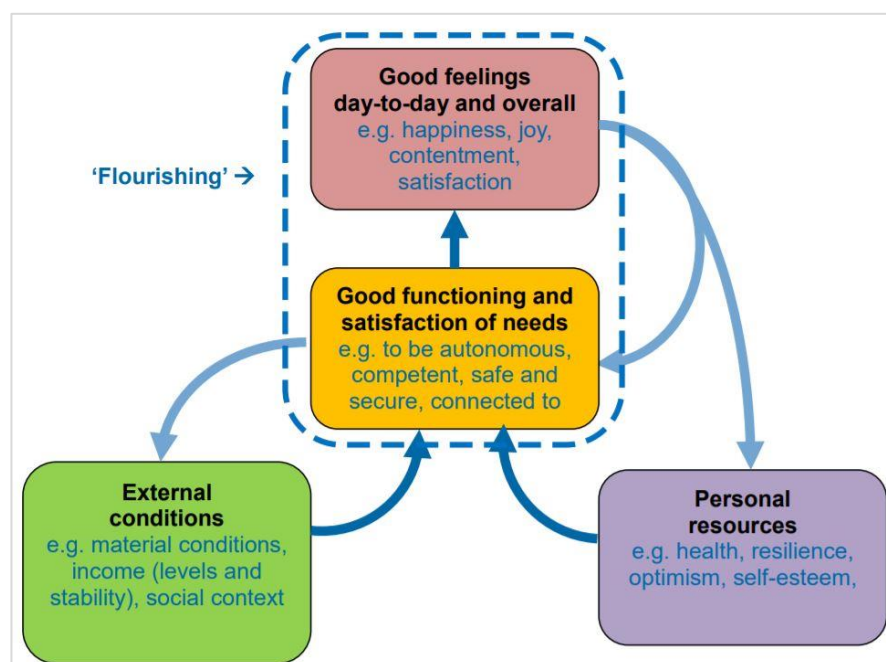


Figure 12. Dynamic Model of Well-Being (S. Thompson & Marks, 2008)

Mental ill health, such as depression, has been identified as a predictor for a change in psychological well-being (Sapranaviciute-Zabazlajeva et al., 2014; Snowden, Dhingra, Keyes, & Anderson, 2010). Findings from Phase 1a systematic narrative review indicated that psychological well-being changes across the military-induced separation period with increases in stress (Andres, 2014; Burton et al., 2009; Marek & Moore, 2015; Van Winkle & Lipari, 2015; Warner et al., 2009) and depression (Everson et al., 2013; Faulk et al., 2012; Meadows, Tanielian, et al., 2016).

Stress was a prominent consequence of dispersal in Phase 2 findings. Among other factors stress was caused by an influx in responsibilities for the military family at-home. This was exacerbated by the intermittent nature of separation, creating extra pressure on the family when the military family member returned home. Interestingly, participants reported that they found dispersal more difficult than a deployment separation. Participants also reported the impact separation had on their mental health, citing specific increase in anxiety and depression.

Not all papers in Phase 1a indicated a negative effect of military-induced separation on the psychological well-being of military spouses and partners. Only one paper considered sleep, identifying four distinct trajectories of sleep complaints. The majority displayed resilient, stable sleep complaints throughout the deployment cycle (K. E. Miller et al., 2018). However, 22% reported worsening sleep during separation. Participants in Phase 2 described difficulties sleeping and increases in tiredness particularly as a result of worry regarding the impact of separation on their family and how they would cope.

The spouses and partners of military family members are critical in determining the overall psychological well-being and coping of the rest of the family during periods of military-induced separation (Clifton, 2007; P. Lester et al., 2010). Literature exploring the impact of military-induced separation on military children has identified a link between multiple separations and their psychological well-being. These papers ascertained a decrease in a child's resilience, increased poorer at-home parental mental health and predicted depression and internalising problems (Barker & Berry, 2009; Cederbaum et al., 2014; Chandra, Lara-Cinisomo, et al., 2010; Creech et al., 2014; Gilreath et al., 2014; Hawkins et al., 2012; P. Lester et al., 2010). Participants in the literature from the systematic narrative literature review and participants in Phase 2 were primarily spouses or partners of military family members. This research has indicated that exploring the experiences and impact of separation on spouses and partners will provide a greater insight into how the separation may impact the family as a whole and to understand how they can be supported.

According to the dynamic model of well-being, the ability to function well can improve external conditions. Emotions serve as a crucial feedback mechanism for functioning and behaviour, where positive emotions serve as positive reinforcement to continue certain behaviour (Marks, 2011). Some personality factors such as optimism, extroversion and self-esteem have been strongly associated with well-being (Costa & McCrae, 1980; Diener, Oishi, & Lucas, 2003)

Military-induced separations can have a negative effect on the psychological well-being of military families, particularly through the increase in stress and depression. However, levels of depression at high and low stress points were found to be moderated by positivity and social support from family and non-military friends, resiliency and relationship satisfaction were significantly negatively correlated with levels of depression (Faulk et al., 2012; Oblea et al., 2016; Skomorovsky, 2014). Cross-sectional survey data in the general population illustrates that happy people function better in life than those who are not and are thus typically more productive and more socially engaged (Diener & Lucas, 2000). Furthermore, experimental social psychology research proposes that positive emotional experiences influence the way in which people perceive and interpret social behaviours and how they initiate social interactions.

A negative outlook on separation can lead to closed boundaries to military family members and thus experience difficulties adjusting to reunions (Boss, 2002, 2004, 2006; Hill, 1949). The Emotional Cycle of Deployment (Pincus et al., 2001) highlighted the importance of adjusting to each stage of deployment. When families are unable to overcome emotional challenges at each stage, problems can arise. It is proposed that this is more intense for dispersed military families who experience similar challenges as the deployment cycle but repeated and in a more condensed time frame.

In addition to the benefits of positive emotional responses, resilience has also been researched as an internal 'protective' factor for well-being during military-induced separations (Oblea et al., 2016; Stent, 2014b). The role and impact of resilience is discussed later (see 7.7).

7.6.3. ABC-X Family Stress Model

Sociologist Hill (1949), created an ABC-X Family Stress Model as a result of studying soldiers and their families after the World War II (see Figure 13). The family stress model supports the interaction of internal and external factors on well-being as described in the dynamic model. The A factor represents a stressor or life event that may impact the family system. The B factor is the availability of family resources and the C factor is the perception of the stressor or event. Following the interaction of A, B and C, X represents the outcome, which may be crisis.

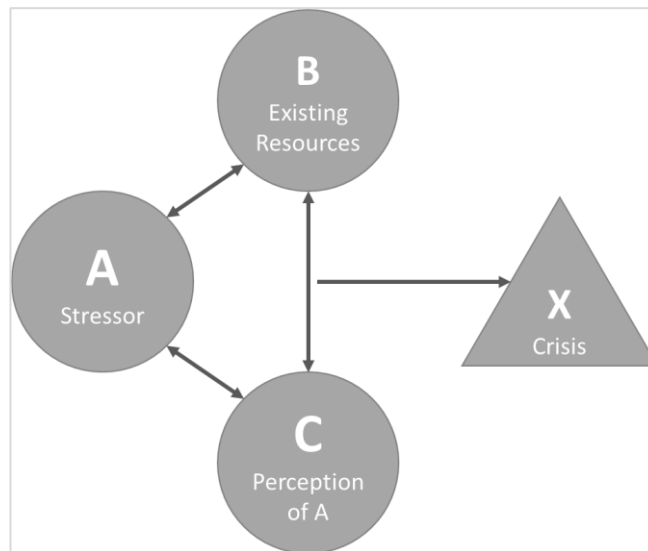


Figure 13. ABC-X Family Stress Model (Hill, 1949)

When experiencing military dispersal (A factor), physical and psychological resources such as finances and support networks (B factor), as well as a positive outlook on the separation (C factor), are more likely to result in positive outcomes and management of separation (X factor). If insufficient resources are available and/or there is a negative perception of the stressor, Hill (1949) argues that the stressor may then reach crisis point. The model has been designed to explain stress but can also apply to well-being.

Due to the importance of factors B and C, research has indicated that any interventions to reduce the chance of crisis should be targeted here (Black, 1993). The identified interventions that were proposed to be beneficial included forming support groups, targeting young families, combating social isolation, coping with indefinite separations, and planning the family's reunion (Black, 1993). Additionally, Michaelson (2013) highlighted the importance of considering both internal and external factors or existing resources and the perception of an event, when attempting to influence policy and practice.

Relationships and support underpinned much of the psychological health research in Phase 1a, primarily as a protective factor for poor psychological health (Andres, 2014; Dandeker et al., 2006; Knobloch et al., 2016; Meadows, Tanielian, et al., 2016; Oblea et al., 2016; Skomorovsky, 2014; Stent, 2014a; Van Winkle & Lipari, 2015). This is unsurprising, given that having supportive relationships has been found to be a strong positive predictor of well-being (Diener & Suh, 2003; Myers, 2003). The role and impact of support networks is discussed later (see 7.8).

7.7. Resilience and Coping

Resilience is a concept that was introduced in Phase 1a as a potential buffer for the impact of challenges faced by military families on psychological well-being during

military-induced separation. Only two papers in the literature review considered resilience but both indicated that higher levels of resilience were associated with greater relationship satisfaction, family communication and lower levels of depression and stress (Oblea et al., 2016; Stent, 2014b). Findings on how to facilitate resilience in military families were inconclusive but there was a suggestion that the presence of community, friends, family and military-related support served as a protective factor (Stent, 2014b).

Resilience has been defined as *“the capacity to maintain competent functioning in the face of major life-stressors”* (Kaplan et al., 1996, p. 158). Military families experiencing military-induced separations continue to function under stress without the support of the military family member. Resilience is a dynamic process encompassing positive adaptation in the context of adversity (Luthar, 2006). Resilience is based on protective factors such as personal, social and familial resources and risk factors such as emotional distress (Kaplan et al., 1996; Kumpfer, 1999). These protective factors are relied upon to help overcome the risk factor (Orthner & Rose, 2009). Findings from Phase 2 supported the literature from Phase 1a and indicated that protective factors such as social support networks and a positive outlook on separation influence experience on separation (see 7.8 for discussion of Social Support).

Although research has highlighted specific resilience protective factors, it is important to acknowledge that these are not fixed, the demands placed on certain support networks may fluctuate dependent upon the situation. More research is needed to fully explore what boosts resilience and the impact this has on dispersed military families during separation. However, the capacity to cope during separation is central to dispersed military families' resilience.

Coping is defined as *“the intentional efforts we engage in to minimize the physical, psychological, or social harm of an event or situation”* (Carroll, 2013). Dispersed military families described a number of ways in which they coped with the challenges they faced during separation. Participants focussed on the positive aspects of separation and the potential strengths gained, such as, feeling psychologically stronger, experiencing personal growth and independence. Research has shown that military families can cope better with military-induced separations if they adopt positive thinking and focus upon those aspects they can control (Bell and Schumm 1999). For participants in Phase 2 with prior dispersal experience, there was a greater level of acceptance of the separation. The intermittent separation was assimilated into their routine. Literature from Phase 1a also identified the differences in coping strategies dependent upon prior experience of separation (Padden et al., 2011)

A common phrase utilised by the majority of participants in Phase 2 was *“it is what it is”*. This has been explained as an acceptance of complexity and ambiguity (Gabora, 2014).

In order to cope with the challenges of dispersal, participants focussed on other aspects of their life and attempted to normalise the separation. Normalisation has been identified as a coping strategy alongside rationalisation, acceptance and reappraisal strategies (Thelwell, Weston, & Greenlees, 2010).

Furthermore, throughout all of the literature in Phase 1a, normalisation was a key resource used by military spouses and partners, suggesting this was used as an aid to adjust to extended separations and framed absences as part of the family story (Gustavsen, 2017; Patzel et al., 2013). Despite this normalisation and acceptance, the effort required to take care of the household and family during separation periods was not discounted (Dandeker et al., 2006; Patzel et al., 2013; Verey & Fossey, 2013). All papers in the review identified a dissatisfaction during separation, where some participants felt under resourced and as though they were single parents during this time (Dandeker et al., 2006; Gustavsen, 2017; Patzel et al., 2013; Verey & Fossey, 2013). Experiencing multiple deployments made separations easier because of the familiarity but also made it more challenging as a result of anticipation and dread of repeating deployment again (Gustavsen, 2017; Patzel et al., 2013). Adaptive strategies were cited by all participants including positive evaluation of marital relationship, autonomy, and utilising informal social networks to buffer the stressors of military-induced separation.

7.8. Social Support

Social support has been repeatedly discussed throughout the literature on the impact of military-induced separation on families. Primarily, social support has been utilised to mitigate the effects of separations on psychological well-being and have been employed as a support strategy for coping. Shumaker and Brownell (1984) termed social support as, when two individuals exchange resources that are perceived to enhance the recipients' well-being. This level of perceived support has been identified as an indicator of coping success (Lazarus & Folkman, 1984). Specifically, five types of social support had been identified: emotional, instrumental, informational, companionship, and validation (Wills & Shinar, 2000).

US research looking at the impact of voluntary separation in military families, reported that social support, specifically from families, was a protective factor that aided their ability to positively cope with the separation (Just-Bourgeois, 2019). Similar findings were found in Phase 1a, where levels of social support were significantly associated with better psychological health, higher levels of relationship satisfaction, fewer depressive symptoms, and lower levels of stress (Andres, 2014; Dandeker et al., 2006; Oblea et al., 2016; Skomorovsky, 2014; Van Winkle & Lipari, 2015). Specifically, informal support from family and other military families appeared to be preferred and was found to be a significant predictor of psychological health and depressive symptoms (Dandeker et al.,

2006; Skomorovsky, 2014). Conversely, Phase 2 indicated social loneliness for participants who had a lack of social support, particularly in the wider military community.

Van Winkle and Lipari (2015) identified higher levels of social support for military families that had children compared to those without. This difference may be explained by the increased likelihood of military families with children attending child-focussed groups and activities that also provide opportunities to socialise and communicate with other families for support. Differences in support accessed, were highlighted by participants in Phase 2. Participants who did not have children argued that military welfare was not inclusive, as services were primarily centred on married parents and children. Those with no children felt excluded from the support and those who were not married were unsure of their eligibility to access support.

Research has shown that social support from family and friends can be viewed more favourably than formal military support services (Bell, Schumm, Elig, Palmer-Johnson, & Tisak, 1993). Those with positive social relationships were found to report fewer health-related problems, higher self-esteem and better personal adjustment to stressors than those with poorer social support networks (Sinokki et al., 2009; Voydanoff, 2005). For UK naval families experiencing separations due to non-operational deployments, support from family members was pivotal in helping them manage daily family life and the emotional challenges of separation (Gribble & Fear, 2019). Participants in Phase 2 reported difficulties in establishing these informal social support networks in both civilian and military communities. They reported a perceived lack of understanding of dispersal from these communities, creating feelings of alienation.

Additionally, social productive activities such as memberships of social organisations have been associated with better psychological well-being (Wahrendorf & Siegrist, 2010). It is difficult to establish whether social support increases psychological well-being or whether those with better psychological well-being are better at establishing social networks and accessing support when needed (e.g. Sharkansky et al., 2000). More research is needed to disentangle this causal relationship. The role of personality, attitudes and actions of individuals should also be considered when looking at what impacts psychological well-being (Huppert, 2009).

Furthermore, literature from Phase 1a suggested that relationship and marital satisfaction can decline over the course of a military-induced separation (Andres, 2014; Meadows, Tanielian, et al., 2016). Similar findings have been identified in research on work-related mobility in Canadian families, where being separated from a family member can cause relationship tension and challenges around providing care (Neil & Neis, 2020). Specifically, for military families, Meadows, Tanielian, et al. (2016) identified a decline in

relationship satisfaction during deployment followed by an immediate increase in satisfaction post deployment before a return to baseline levels.

Dispersed military families in Phase 2 also acknowledged the impact separation had on their familial relationships. Finding balance in these relationships was of utmost importance to the participants. Specific challenges to this were the recurring separation and reunion of the military family member. As with Phase 1a, challenges in relationship satisfaction fluctuated over the course of separation.

7.9. Strengths and Limitations

There are many strengths and limitations of this PhD research to consider. Each phase provided important contribution to understanding the psychological and social impact of intermittent separation and a critique of the methods used was reported throughout the thesis.

A mixed methods explanatory sequential design over two phases allowed for an exploratory approach to the research phenomenon. Phase 1 provided the base for 'what is currently known' about the psychological and social impact of intermittent separation. The systematic narrative review strived to locate all relevant published and unpublished research through a systematic search strategy. Whereas traditional reviews do not usually attempt to locate all relevant literature and focus on pivotal research papers, potentially creating bias. The search strategy utilised also ensured that the literature review could be replicated. The results of the systematic review were synthesised to present the 'current state' of knowledge regarding the impact of military-induced separation on military families.

By presenting what is known first, reflection was possible to ensure that the questions on the semi-structured interview schedule covered a broad range of topics that were essential to separation experience. Utilising a qualitative method in Phase 2 ensured that a greater understanding of the topic could be ascertained with primary research (Maxwell, 2008).

Despite these being the most appropriate research methods to attain an understanding of what is already known about dispersed military families, this deviated from the quantitative research methods traditionally used in the first phase of an explanatory sequential design (see Creswell, 2014). Quantitative methods such as questionnaire and surveys are often utilised as they provide quick results in an easily accessible format in large quantities (T. Jones, Baxter, & Khanduja, 2013). Conversely, systematic narrative reviews and geospatial analysis of secondary data are more time consuming and require additional resources (GrindGIS, 2018; Smith, Devane, Begley, & Clarke,

2011). Consequently, this increased the time needed to complete Phase 1 of this study, putting pressure on the time constraints associated with a PhD study.

Employing a convenience sampling strategy created the possibility of bias. The voluntary nature of this recruitment method increased the probability that only those who felt strongly about the impact of separation on dispersed military families took part, encouraging certain outcomes (Moore, Notz, & Notz, 2006). In an attempt to overcome this potential problem, the research aimed to achieve a maximum variance sample. Unfortunately, participant recruitment resulted in primarily female spouse of military personnel. Consequently, the experiences of male spouses and partners and those of children are not known.

Framework Analysis was identified as the most appropriate analysis of the primary research data to ensure that any differences across the data could be explored. Overall, little differences regarding demographics of participants were found to have an impact on the data. Regardless, applying a framework to all the data ensured transparency, allowing the findings' themes to be traced back to initial codes, thus adding to the robustness of this method (Ritchie & Spencer, 2002).

The findings from Phase 1a and Phase 2 were fairly easy to integrate to present an overall understanding of knowledge and to ensure mixed methods (Fetters & Freshwater, 2015; Yin, 2006). However, some difficulties arose in integrating findings from Phase 1b. The aim of the geospatial data was to determine whether there was a suitable proxy variable for the location of dispersed military families. Unfortunately, no appropriate dataset was identified. Consequently, the intention to further explore the practical implications of the specific locations where dispersed military families resided was unachievable. It is important to note, that despite essentially reporting the equivalent of a non-significant result in quantitative research, this finding provide an important recommendation for policy and practice regarding data collection. It is important to report negative findings to remove bias (Visentin, Cleary, & Hunt, 2020).

Although this research specifically focussed on dispersed military families, it is proposed that the majority of the findings can be applied to other populations, such as families experiencing work-related separations.

7.10. Reflections

This section aims to provide some reflection on my own position within the research regarding recruitment methods, data collection and philosophical position. The strengths and limitations of these are considered.

During the process of this PhD, it was clear that working in the Northern Hub for Veterans and Military Families Research and my personal experience of growing up in a military

family had the potential to impact this research. I felt that the impact of this was mainly during Phase 2, through participant recruitment and the semi-structured interviews and was two-fold.

Firstly, working in a research hub investigating the military community enabled me to develop good relationships with external organisations working with military families. These relationships were primarily established through my work as a researcher on the Map of Need project (see section 1.2 Project Background). These already established connections to external organisations granted me support in advertising recruitment for Phase 2 of the PhD research (see section 6.2.1 Participant Recruitment). Utilising these connections gave me greater access to dispersed military families, a cohort that is difficult to access. These organisations were able to harness their already established trust with military families and their outreach, primarily through social media, to disseminate research recruitment.

Secondly, upon contact with participants and initial conversations, I shared that I had grown up in a military family and had substantial experience of dispersal. Discovering this shared experience seemed to help in getting participants to open-up during the semi-structured interviews. Some participants expressed the benefit of being able to talk to someone who *'just gets it'*. I was able to comprehend nuances of military life and understand certain language pertaining to the military. There was no need for certain explanations such as acronyms, ensuring a flow in conversation, removing the need for constant clarification. This led to greater opportunities to explore and concentrate on personal experiences as opposed to just the 'facts'. Additionally, following interviews, a couple of participants highlighted their relief in being able to speak to someone that understood their experiences.

Sharing this personal experience put myself at an advantage during data collection, however it is important to acknowledge that this was not always the case. Due to the knowledge of my own experience, I felt that sometimes participants would focus less on expanding on the explanation of certain answers citing *'well you know...'* This meant that further probing questions were sometimes needed to extract this information for the research, occasionally disrupting the flow in conversation. Consequently, when it came to data analysis it was clear that some of the context to participants answers were given in a roundabout way. Due to the assumption of my own understanding, I felt there was sometimes more in what participants did not say.

Whilst reflecting on my position as having grown up in a military family, throughout the PhD I have also considered the impact of my philosophical approach to research. With a background in Psychology, I have experience in both quantitative and qualitative methodology, favouring a mixed methods approach to research. Due to the nature of

the mixed methods research and the topic of interest, Pragmatism provided an appropriate theoretical basis. Not only do I feel that this proved an efficient approach for the research across two phases, but it also aligned with my personal preference to research. Putting the research aims at the centre of the research as opposed to a personal preference for a certain method, ensured authenticity of this research.

7.11. Original Contribution to Knowledge

There are a number of aspects of this thesis that provide an original contribution to knowledge. The aim of this study was to explore the psychological and social impact of intermittent separation of dispersed military families. Overall, a novel combination of research methods was utilised, combining a systematic narrative literature review and geospatial secondary data analysis and semi-structured interviews to build a baseline picture.

The emerging findings from this research have indicated several new topics that have not been discussed in detail in previous literature. In particular, identity was central to the dispersal experience, characterised by its fluid nature over the separation period. Loneliness has previously been noted in other research, but this thesis has indicated distinct experiences of emotional loneliness and social loneliness throughout intermittent separation, with a fluctuation in emotional loneliness across separation. These two topics in particular are highlighted as important areas for further research.

The findings from in this thesis have been supported by research carried out on families from the single services experiencing non-deployment related family separation. However, this is the first tri-service research that has been carried out looking at dispersed military families and the first to specifically consider the psychological and social impact of intermittent separation.

It was important from the beginning to ensure that the voice of the dispersed military families were at the centre of this research. Consequently, almost all the recommendations from this thesis are directly from the participants themselves, highlighting where support is needed, networks and the need for an increase in awareness of dispersal.

7.12. Overview of Recommendations

Recommendations were made throughout the thesis, these came as a direct result of research findings and in the case of Phase 2, participants themselves. These recommendations suggest what can be put in place to improve the experience of separation for dispersed military families. It is also reported where these

recommendations align with previously established recommendations from existing reports on dispersed families.

Firstly, there is a need for data on dispersed military families. Phase 1b ascertained that there is no publicly available dataset that can be used as a suitable proxy variable for the geolocation of dispersed military families, due to the number of limitations on existing data. Additionally, there are no definitive records of the number of military families. The MOD's Joint Personnel Administration (JPA) system holds all the information on military personnel and their families. However, completion is largely self-reported and not compulsory. Consequently, the following was recommended:

A greater focus should be given to Joint Personnel Administration System used in the MOD to record information about military personnel, making completion compulsory.

Greater accuracy is needed regarding information on the whole of the military family such as, dispersal status and location in addition to the current declaration of marital status and dependent children.

Similar recommendations were reported in RAF Families Federation (2019a) briefing paper from research on dispersed RAF families. They went further to suggest that a 'marker' should be placed on the JPA to indicate that a family is not living in military accommodation.

This information on military families on the JPA system would be especially helpful for military welfare. Findings from Phase 2 indicated a greater need for military welfare to communicate with dispersed military families to provide information and support. It is suggested that there needs to be greater:

Outreach from military welfare to establish contact with dispersed military families and provide information and support.

Again, this recommendation was included as an outcome in reports on Naval, Army and RAF dispersed families (Gribble & Fear, 2019; RAF Families Federation, 2019a; Verey & Fossey, 2013). All indicated that military welfare provision should be increased, encouraging outreach to dispersed military families to remind them of the 'welfare offer', encourage contact and provide information on support and events available to them.

There was also a focus on the practical implementation of creating greater contacts with and connections to dispersed military families from military welfare and the wider military community. Due to the geospatial nature of dispersal, families were unable to access military bases where military welfare is primarily located. There was also a confusion around which on-base welfare should be contacted and whether it was the one closest to where the dispersed military family was residing, or the one associated with the

location where the military family member is posted. Regardless, it is recommended that military welfare:

Provide access or at least a point of contact at local bases, relative to the location of the dispersed family as well as the base at which their military family member is posted.

RAF Families Federation (2019a) suggested that the RAF and MOD should consider options for access to military bases to find the best balance support for families and military base security. Military base entry policies should also be reviewed to ensure families are able to access welfare.

The next set of recommendations came from the participants interviewed in Phase 2 and emphasise the need for connections to others, greater information, and awareness.

Create greater connections with other dispersed families through social media and localised 'meet-ups' for adults and children.

More accessible information is needed for dispersed military families, detailing what they are entitled to in terms of support and how/where they can access this.

Greater awareness and acknowledgement is needed regarding the dispersed military families - what dispersal is, the impact of the separation and explore how to support the families.

Gribble and Fear (2019) corroborated the recommendations regarding communication and raising awareness, highlighting the importance of making sure the non-military family members can access information and not rely of the military family member. Furthermore, participants in Verey and Fossey (2013) suggested a 'welcome pack' type approach for military families each time the military family is posted to a new location. This would ensure up-to-date information regarding signposting, services, and information on activities. The Army wives in this report argued that it would help them feel more acknowledged by the military community.

Due to the exploratory nature of this PhD research, findings have provided a broad overview of the psychological and social impact of intermittent separation. Consequently, more in-depth research is need into specific psychological and social areas highlighted in the discussion. More specifically, the following is recommended:

Further research is needed on the impact of multiple military-induced separations on military families

Further research is needed with a greater focus on qualitative methods to further explore the meanings and experiences of military families.

7.13. Conclusions

This study has identified specific psychological and social factors that are associated with intermittent separation for dispersed military families. A mixed methods approach was carried out over two phases, with Phase 1 exploring existing knowledge and Phase 2 producing primary research findings.

Upon the integration of these findings from Phase 1 and Phase 2, it was proposed that dispersed military families have a fluid identity that can change over the separation period, dependent upon the social situation (i.e., military vs. civilian community). A disconnection with the military community and the separation from the military family member, caused dispersed military families to experience social and emotional loneliness. It was argued there was a fluctuation in emotional loneliness across separation. Stability was consistently reported as a reason for dispersal, particularly as a result of the implementation of UK initiatives that encouraged stability and flexibility for military family life.

Separation had an impact on the psychological well-being of dispersed military families. Internal and external resources were found to be integral in determining good well-being and stressors associated with separation posed a challenge to this. Resilience was highlighted as a buffer for the challenges experienced. Specifically, resilient protective factors such as social support networks, a positive outlook and normalisation helped dispersed military families to cope with separation.

Recommendations for support for dispersed military families included focussing on qualitative research methods to assess the impact of separation; accurate recording of information on military families on MOD JPA system; greater inclusion of dispersed military families in the military community; greater access to information and support and raising awareness of dispersal.

This PhD research was primarily exploratory in nature, with a focus on gaining broad understanding of the impact of intermittent separation on dispersed military families. Consequently, more in-depth research is needed into specific psychological and social areas highlighted above.

References

- Acion, L., Ramirez, M. R., Jorge, R. E., & Arndt, S. (2013). Increased risk of alcohol and drug use among children from deployed military families. *Addiction, 108*(8), 1418-1425.
- AFF. (2016a). Big Survey Report: Future of Military Housing. Retrieved from <https://aff.org.uk/wp/wp-content/uploads/2018/02/AFFbigsurveyfullbrieffinal.pdf>.
- AFF. (2016b). Compromises of Army Life Survey. Retrieved from <https://aff.org.uk/wp-content/uploads/2018/02/compromisesofarmylifesurveycommandbrieffinal.pdf>.
- Afifi, T. D., & Keith, S. (2004). A risk and resiliency model of ambiguous loss in postdivorce stepfamilies. *The Journal of Family Communication, 4*(2), 65-98.
- Althubaiti, A. (2016). Information bias in health research: definition, pitfalls, and adjustment methods. *Journal of multidisciplinary healthcare, 9*, 211.
- Andres, M. (2014). Distress, support, and relationship satisfaction during military-induced separations: A longitudinal study among spouses of Dutch deployed military personnel. *Psychological Services, 11*(1), 22.
- Andrews, F. M., & Withey, S. B. (2012). *Social indicators of well-being: Americans' perceptions of life quality*. Springer Science & Business Media.
- Backhaus, J., Junghanns, K., Broocks, A., Riemann, D., & Hohagen, F. (2002). Test-retest reliability and validity of the Pittsburgh Sleep Quality Index in primary insomnia. *Journal of psychosomatic research, 53*(3), 737-740.
- Baker, M., & Schaltegger, S. (2015). Pragmatism and new directions in social and environmental accountability research. *Accounting, Auditing & Accountability Journal*.
- Barker, L. H., & Berry, K. D. (2009). Developmental issues impacting military families with young children during single and multiple deployments. *Military Medicine, 174*(10), 1033-1040.
- Batt, R., & Valcour, P. M. (2003). Human resources practices as predictors of work-family outcomes and employee turnover. *Industrial Relations: A Journal of Economy and Society, 42*(2), 189-220.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck depression inventory-II. *San Antonio, 78*(2), 490-498.
- Bell, D., Schumm, W., Elig, T., Palmer-Johnson, C., & Tisak, J. (1993). *Helping Army families cope with deployments: Lessons learned from Desert Storm*. Paper presented at the 101st Annual Convention of the American Psychological Association, Toronto, Canada.
- Bello-Utu, C. F., & DeSocio, J. E. (2015). Military deployment and reintegration: a systematic review of child coping. *Journal of Child and Adolescent Psychiatric Nursing, 28*(1), 23-34.
- Bellou, P., & Gerogianni, K. G. (2014). The contribution of family in the care of patient in the hospital.

- Berry, J. O., & Jones, W. H. (1995). The parental stress scale: Initial psychometric evidence. *Journal of Social and Personal Relationships*, 12(3), 463-472.
- Betzner, A. E. (2008). Pragmatic and dialectic mixed method approaches: An empirical comparison.
- Biesta, G. (2010). Pragmatism and the philosophical foundations of mixed methods research. *Sage handbook of mixed methods in social and behavioral research*, 2, 95-118.
- Black, W. G. (1993). Military-induced family separation: A stress reduction intervention. *Social Work*, 38(3), 273-280.
- Blaisure, K. R., MacDermid, S., Saathoff-Wells, T., Pereira, A., & Dombro, A. L. (2012). *Serving military families in the 21st century*. Routledge.
- Blue Star Families. (2018). Military Family Lifestyle Survey: Comprehensive Report. Retrieved from <https://bluestarfam.org/wp-content/uploads/2019/03/2018MFLS-ComprehensiveReport-DIGITAL-FINAL.pdf>.
- Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2011). *Introduction to meta-analysis*: John Wiley & Sons.
- Boss, P. (1987). Family Stress: Perception and Context *Handbook of marriage and the family*.
- Boss, P. (1999). Ambiguous loss.
- Boss, P. (2002). Family Stress Management: A Contextual Approach. In: Sage Publications.
- Boss, P. (2004). Ambiguous loss research, theory, and practice: Reflections after 9/11. *Journal of marriage and family*, 66(3), 551-566.
- Boss, P. (2006). *Loss, trauma, and resilience: Therapeutic work with ambiguous loss*: WW Norton & Company.
- Boss, P. (2007). Ambiguous loss theory: Challenges for scholars and practitioners. *Family Relations*, 56(2), 105-111.
- Boss, P., & Greenberg, J. (1984). Family boundary ambiguity: A new variable in family stress theory. *Family process*, 23(4), 535-546.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative research*, 6(1), 97-113.
- Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of mixed methods research*, 1(1), 8-22.
- Burholt, V., & Scharf, T. (2014). Poor health and loneliness in later life: the role of depressive symptoms, social resources, and rural environments. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 69(2), 311-324.

- Burholt, V., Windle, G., Morgan, D. J., & Team, C. W. (2017). A social model of loneliness: the roles of disability, social resources, and cognitive impairment. *The Gerontologist*, 57(6), 1020-1030.
- Burrell, L. M., Adams, G. A., Durand, D. B., & Castro, C. A. (2006). The impact of military lifestyle demands on well-being, army, and family outcomes. *Armed Forces & Society*, 33(1), 43-58.
- Burton, T., Farley, D., & Rhea, A. (2009). Stress-induced somatization in spouses of deployed and nondeployed servicemen. *Journal of the American Academy of Nurse Practitioners*, 21(6), 332-339.
- Buysse, D. J., Reynolds III, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: a new instrument for psychiatric practice and research. *Psychiatry research*, 28(2), 193-213.
- Cabinet Office. (2010). *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/62482/strategic-defence-security-review.pdf
- Cabinet Office. (2015). *National Security Strategy and Strategic Defence and Security Review 2015: A Secure and Prosperous United Kingdom*. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/478933/52309 Cm 9161 NSS SD Review web only.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/478933/52309_Cm_9161_NSS_SD_Review_web_only.pdf)
- Cacioppo, S., Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: Clinical import and interventions. *Perspectives on Psychological Science*, 10(2), 238-249.
- Campaign to End Loneliness. (2020). *The Psychology of Loneliness: Why it matters and what we can do*. Retrieved from https://www.campaigntoendloneliness.org/wp-content/uploads/Psychology_of_Loneliness_FINAL_REPORT.pdf
- Carroll, L. (2013). Passive coping strategies. In *Encyclopedia of Behavioural Medicine* (pp. 1442). New York: Springer.
- CASP. (2018). CASP Checklists. Retrieved from <https://casp-uk.net/casp-tools-checklists/>
- Cederbaum, J. A., Gilreath, T. D., Benbenishty, R., Astor, R. A., Pineda, D., DePedro, K. T., . . . Atuel, H. (2014). Well-being and suicidal ideation of secondary school students from military families. *Journal of Adolescent Health*, 54(6), 672-677.
- Chabot, D. R. (2011). Family systems theories of psychotherapy.
- Chandra, A., Lara-Cinisomo, S., Jaycox, L. H., Tanielian, T., Burns, R. M., Ruder, T., & Han, B. (2010). Children on the homefront: The experience of children from military families. *Pediatrics*, 125(1), 16-25.
- Chandra, A., Lara-Cinisomo, S., Jaycox, L. H., Tanielian, T., Han, B., Burns, R. M., & Ruder, T. (2011). Views from the homefront: The experiences of youth and spouses from military families. *Rand health quarterly*, 1(1).
- Chandra, A., Martin, L. T., Hawkins, S. A., & Richardson, A. (2010). The impact of parental deployment on child social and emotional functioning: Perspectives of school staff. *Journal of Adolescent Health*, 46(3), 218-223.

- Chartrand, M. M., Frank, D. A., White, L. F., & Shope, T. R. (2008). Effect of parents' wartime deployment on the behavior of young children in military families. *Archives of pediatrics & adolescent medicine*, 162(11), 1009-1014.
- Clever, M., & Segal, D. R. (2013). The demographics of military children and families. *The Future of Children*, 13-39.
- Clifton, G. (2007). The experience of education of the army child. *Doctoral dissertation, Oxford Brookes University*.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.
- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the US. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health: Claremont symposium on applied social psychology* (pp. 31-67). In: Newbury Park, CA: Sage.
- Collins, J. A., & Fauser, B. C. (2005). Balancing the strengths of systematic and narrative reviews. In: Oxford University Press.
- Cooper, L., Caddick, N., Godier, L., Cooper, A., & Fossey, M. (2016). Transition From the Military Into Civilian Life: An Exploration of Cultural Competence. *Armed Forces & Society*, 0095327X16675965.
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: happy and unhappy people. *Journal of personality and social psychology*, 38(4), 668.
- Craigie, T.-A. L., Brooks-Gunn, J., & Waldfogel, J. (2012). Family structure, family stability and outcomes of five-year-old children. *Families, Relationships and Societies*, 1(1), 43-61.
- Creech, S. K., Hadley, W., & Borsari, B. (2014). The impact of military deployment and reintegration on children and parenting: A systematic review. *Professional Psychology: Research and Practice*, 45(6), 452.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative*: Prentice Hall Upper Saddle River, NJ.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*: SAGE publications.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*: Sage publications.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research*, 209, 240.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*: Sage publications.
- Crouter, A. C., Bumpus, M. F., Head, M. R., & McHale, S. M. (2001). Implications of overwork and overload for the quality of men's family relationships. *Journal of marriage and family*, 63(2), 404-416.
- Daley, J. G. (1999). *Social work practice in the military*: Psychology Press.

- Dandeker, C., French, C., Birtles, C., & Wessely, S. (2006). *Deployment experiences of British Army wives before, during and after deployment: Satisfaction with military life and use of support networks*. Retrieved from
- De Silva, H., Johnson, L., & Wade, K. (2011). *Long distance commuters in Australia: A socio-economic and demographic profile*. Paper presented at the Staff Papers, Paper given to the 34th Australasian Transport Research Forum.
- Denyer, D., & Tranfield, D. (2009). Producing a systematic review.
- Denzin, N. K. (2012). Triangulation 2.0. *Journal of mixed methods research*, 6(2), 80-88.
- Department for Education. (2021). Pupil Premium. Retrieved from <https://www.gov.uk/government/publications/pupil-premium/pupil-premium>
- Department for Work and Pensions. (2020). Local Child Poverty Proxy Measure. Retrieved from <https://data.gov.uk/dataset/b74d4f49-7d79-492f-a062-334355d3d2a7/local-child-poverty-proxy-measure>
- DePoy, E., & Gitlin, L. (2011). Introduction to research: Understanding and applying multiple strategies . St. Louis. In: Missouri, USA: Elsevier Health Sciences.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, 55(1), 34.
- Diener, E., & Lucas, R. E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of happiness studies*, 1(1), 41-78.
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual review of psychology*, 54(1), 403-425.
- Diener, E., Scollon, C. N., & Lucas, R. E. (2009). The evolving concept of subjective well-being: the multifaceted nature of happiness.
- Diener, E., & Suh, E. M. (2003). National differences in subjective well-being. . In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: Foundations of hedonic psychology* (pp. 434–450): Russell Sage Foundation.
- Dillon, D. R., O'Brien, D. G., & Heilman, E. E. (2000). Literacy research in the next millennium: From paradigms to pragmatism and practicality. *Reading Research Quarterly*, 35(1), 10-26.
- Drummet, A. R., Coleman, M., & Cable, S. (2003). Military families under stress: Implications for family life education. *Family Relations*, 52(3), 279-287.
- Dures, E., Rumsey, N., Morris, M., & Gleeson, K. (2011). Mixed methods in health psychology: Theoretical and practical considerations of the third paradigm. *Journal of health psychology*, 16(2), 332-341.
- Dykstra, P. A., & Fokkema, T. (2007). Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. *Basic and applied social psychology*, 29(1), 1-12.
- Eaton, K. M., Hoge, C. W., Messer, S. C., Whitt, A. A., Cabrera, O. A., McGurk, D., . . . Castro, C. A. (2008). Prevalence of mental health problems, treatment need,

and barriers to care among primary care-seeking spouses of military service members involved in Iraq and Afghanistan deployments. *Military Medicine*, 173(11), 1051-1056.

- Ellis, S. D., Bertoni, A. G., Bonds, D. E., Clinch, C. R., Balasubramanyam, A., Blackwell, C., . . . Goff Jr, D. C. (2007). Value of recruitment strategies used in a primary care practice-based trial. *Contemporary clinical trials*, 28(3), 258-267.
- Encyclopædia Britannica. (2017). Family. *Encyclopædia Britannica*. Retrieved from <https://www.britannica.com/topic/family-kinship>.
- Esposito-Smythers, C., Wolff, J., Lemmon, K. M., Bodzy, M., Swenson, R. R., & Spirito, A. (2011). Military youth and the deployment cycle: Emotional health consequences and recommendations for intervention. *Journal of Family Psychology*, 25(4), 497.
- Everson, R. B., & Camp, T. (2011). Seeing systems: An introduction to systemic approaches with military families. In R. B. Everson & C. R. Figley (Eds.), *Families under fire: Systemic therapy with military families* (pp. 3-30): New York: Routledge.
- Everson, R. B., Darling, C. A., & Herzog, J. R. (2013). Parenting stress among US Army spouses during combat-related deployments: the role of sense of coherence. *Child & Family Social Work*, 18(2), 168-178.
- Faber, A. J., Willerton, E., Clymer, S. R., MacDermid, S. M., & Weiss, H. M. (2008). Ambiguous absence, ambiguous presence: A qualitative study of military reserve families in wartime. *Journal of Family Psychology*, 22(2), 222.
- Faulk, K. E., Gloria, C. T., Cance, J. D., & Steinhardt, M. A. (2012). Depressive symptoms among US military spouses during deployment: The protective effect of positive emotions. *Armed Forces & Society*, 38(3), 373-390.
- Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of mixed methods research*, 4(1), 6-16.
- Fenner, Y., Garland, S. M., Moore, E. E., Jayasinghe, Y., Fletcher, A., Tabrizi, S. N., . . . Wark, J. D. (2012). Web-based recruiting for health research using a social networking site: an exploratory study. *Journal of medical Internet research*, 14(1), e20.
- Fetters, M. D., & Freshwater, D. (2015). The 1 + 1 = 3 Integration Challenge. *Journal of mixed methods research*, 9(2), 115-117. doi:10.1177/1558689815581222
- Flake, E. M., Davis, B. E., Johnson, P. L., & Middleton, L. S. (2009). The psychosocial effects of deployment on military children. *Journal of Developmental & Behavioral Pediatrics*, 30(4), 271-278.
- Forces Network. (2018). Final Phase Of British Forces Germany Rebasing 'To Be Made As Easy As Possible'. Retrieved from <https://www.forces.net/news/final-phase-british-forces-germany-rebasing-be-made-easy-possible>.
- Fossey, M. (2012). *Unsung heroes: developing a better understanding of the emotional support needs of Service families*: Centre for Mental Health.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of general psychology*, 2(3), 300.

- Gabora, L. (2014). The Hidden Meaning of "It Is What It Is". Retrieved from <https://www.psychologytoday.com/gb/blog/mindbloggling/201405/the-hidden-meaning-it-is-what-it-is>
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC medical research methodology*, 13(1), 1-8.
- Gambardella, L. C. (2008). Role-exit theory and marital discord following extended military deployment. *Perspectives in psychiatric care*, 44(3), 169-174.
- Gardner, B., Alfrey, K.-L., Vandelanotte, C., & Rebar, A. L. (2018). Mental health and well-being concerns of fly-in fly-out workers and their partners in Australia: a qualitative study. *BMJ open*, 8(3).
- Gilreath, T. D., Astor, R. A., Cederbaum, J. A., Atuel, H., & Benbenishty, R. (2014). Prevalence and correlates of victimization and weapon carrying among military- and nonmilitary-connected youth in Southern California. *Preventive medicine*, 60, 21-26.
- Goles, T., & Hirschheim, R. (2000). The paradigm is dead, the paradigm is dead... long live the paradigm: the legacy of Burrell and Morgan. *Omega*, 28(3), 249-268.
- Golish, T. D., & Powell, K. A. (2003). Ambiguous loss': Managing the dialectics of grief associated with premature birth. *Journal of Social and Personal Relationships*, 20(3), 309-334.
- Gorman, G. H., Eide, M., & Hisle-Gorman, E. (2010). Wartime military deployment and increased pediatric mental and behavioral health complaints. *Pediatrics*, peds. 2009-2856.
- Greene, J. C. (2006). Toward a methodology of mixed methods social inquiry. *Research in the Schools*, 13(1), 93-98.
- Greene, J. C. (2007). *Mixed methods in social inquiry* (Vol. 9): John Wiley & Sons.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational evaluation and policy analysis*, 11(3), 255-274.
- Gribble, R., & Fear, N. (2019). The effect of non-operational family separations on family functioning and well-being among Royal Navy/Royal Marines families. Retrieved from <https://nff.org.uk/wp-content/uploads/2019/02/Non-Operational-Separations.pdf>.
- GrindGIS. (2018). Limitations or Challenges of GIS. Retrieved from <https://grindgis.com/remote-sensing/limitations-or-challenges-of-gis>
- Gustavsen, E. (2017). The Privatized Meaning of Wartime Deployments: Examining the Narratives of Norwegian Military Spouses. *Ethos*, 45(4), 514-531.
- Hamilton, R. J., & Bowers, B. J. (2006). Internet recruitment and e-mail interviews in qualitative studies. *Qualitative Health Research*, 16(6), 821-835.
- Hammersley, M. (2001). On 'systematic' reviews of research literatures: a 'narrative' response to Evans & Benefield. *British educational research journal*, 27(5), 543-554.

- Haslam, S. A., Turner, J. C., Oakes, P. J., McGarty, C., & Hayes, B. K. (1992). Context-dependent variation in social stereotyping 1: The effects of intergroup relations as mediated by social change and frame of reference. *European Journal of Social Psychology*, 22(1), 3-20.
- Hawkins, S. A., Schlomer, G. L., Bosch, L., Casper, D. M., Wiggs, C. B., Card, N. A., & Borden, L. (2012). A review of the impact of US military deployments during conflicts in Afghanistan and Iraq on children's functioning. *Family Science*, 3(2), 99-108.
- Hayward, R. (2012). The invention of the psychosocial: An introduction. *History of the human sciences*, 25(5), 3-12.
- Hein, I. M., De Vries, M. C., Troost, P. W., Meynen, G., Van Goudoever, J. B., & Lindauer, R. J. (2015). Informed consent instead of assent is appropriate in children from the age of twelve: Policy implications of new findings on children's competence to consent to clinical research. *BMC Medical Ethics*, 16(1), 76.
- Higate, P., & Cameron, A. (2006). Reflexivity and researching the military. *Armed Forces & Society*, 32(2), 219-233.
- Hill, R. (1949). Families under stress: adjustment to the crises of war separation and return.
- Hinojosa, R., Hinojosa, M. S., & Högnäs, R. S. (2012). Problems with veteran-family communication during Operation Enduring Freedom/Operation Iraqi Freedom military deployment. *Military Medicine*, 177(2), 191-197.
- Hodgkinson, G. P., & Ford, J. K. (2014). Narrative, meta-analytic, and systematic reviews: What are the differences and why do they matter? *Journal of Organizational Behavior*, 35(S1), S1-S5.
- Hogg, M. A., Terry, D. J., & White, K. M. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. *Social psychology quarterly*, 255-269.
- Hogg, M. A., & Turner, J. C. (1985). Interpersonal attraction, social identification and psychological group formation. *European Journal of Social Psychology*, 15(1), 51-66.
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of psychosomatic research*, 11(2), 213-218.
- House of Commons Defence Committee. (2019). *Armed Forces Covenant Annual Report 2018*. Retrieved from <https://www.raf-ff.org.uk/wp-content/uploads/2019/09/House-of-Commons-Defence-Select-Committee-report.pdf>
- Houston, J. B., Pfefferbaum, B., Sherman, M. D., Melson, A. G., Jeon-Slaughter, H., Brand, M. W., & Jarman, Y. (2009). Children of deployed National Guard troops: Perceptions of parental deployment to Operation Iraqi Freedom. *Psychiatric Annals*, 39(8).
- Huddy, L. (2001). From social to political identity: A critical examination of social identity theory. *Political psychology*, 22(1), 127-156.
- Hudson, W. W. (1982). *The clinical measurement package: A field manual*: Dorsey Press Homewood, IL.

- Huebner, A. J., & Mancini, J. A. (2005). Adjustments among adolescents in military families when a parent is deployed. *Final Report to the Military Family Research Institute and Department of Defense Quality of Life Office*, 1-50.
- Huebner, A. J., Mancini, J. A., Wilcox, R. M., Grass, S. R., & Grass, G. A. (2007). Parental deployment and youth in military families: Exploring uncertainty and ambiguous loss. *Family Relations*, 56(2), 112-122.
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*: Sage.
- Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-Being*, 1(2), 137-164.
- Ibáñez, V., Silva, J., & Cauli, O. (2018). A survey on sleep assessment methods. *PeerJ*, 6, e4849.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field methods*, 18(1), 3-20.
- Johnson, B., & Turner, L. A. (2003). Data collection strategies in mixed methods research. *Handbook of mixed methods in social and behavioral research*, 297-319.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of mixed methods research*, 1(2), 112-133.
- Jones, L., Saksvig, B. I., Grieser, M., & Young, D. R. (2012). Recruiting adolescent girls into a follow-up study: benefits of using a social networking website. *Contemporary clinical trials*, 33(2), 268-272.
- Jones, T., Baxter, M., & Khanduja, V. (2013). A quick guide to survey research. *The Annals of The Royal College of Surgeons of England*, 95(1), 5-7.
- Just-Bourgeois, C. L. (2019). The Lived Experiences of Military Spouses Who Choose to Live Separately.
- Kaplan, C. P., Turner, S., Norman, E., & Stillson, K. (1996). Promoting resilience strategies: A modified consultation model. *Children & Schools*, 18(3), 158-168.
- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a Research Paradigm and Its Implications for Social Work Research. *Social Sciences*, 8(9), 255.
- Kiernan, M. D., & Hill, M. (2018). Framework analysis: a whole paradigm approach. *Qualitative Research Journal*.
- Kiernan, M. D., Hill, M., McGill, G., Caddick, N., Wilson, G., Forster, N., . . . Osborne, A. (2018). *Maintaining Independence: A study into the Health and Social Well-Being of older limbless veterans*. Retrieved from <https://northumbria-cdn.azureedge.net/-/media/corporate-website/new-sitecore-gallery/services/business-and-enterprise-services/the-northern-hub-for-military-veterans-and-families-research/maintaining-independence-final-project-report.pdf?modified=20180712141254>
- Knobloch, L. K., Basinger, E. D., Wehrman, E. C., Ebata, A. T., & McGlaughlin, P. C. (2016). Communication of military couples during deployment and reunion: Changes, challenges, benefits, and advice. *Journal of Family Communication*, 16(2), 160-179.

- Koeter, M., & Ormel, J. (1991). *General health questionnaire: Nederlandse bewerking*: Swets Test Services.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, 16(9), 606-613.
- Kroenke, K., Strine, T. W., Spitzer, R. L., Williams, J. B., Berry, J. T., & Mokdad, A. H. (2009). The PHQ-8 as a measure of current depression in the general population. *Journal of affective disorders*, 114(1-3), 163-173.
- Kuhn, T. S. (2012). *The structure of scientific revolutions*: University of Chicago press.
- Kumpfer, K. L. (1999). Factors and processes contributing to resilience. In *Resilience and development* (pp. 179-224): Springer.
- Lakoff, G. (2008). *Women, fire, and dangerous things: What categories reveal about the mind*: University of Chicago press.
- Landesman, J., & Seward, R. R. (2013). Long distance commuting and couple satisfaction in Israel and United States: An exploratory study. *Journal of Comparative Family Studies*, 44(6), 765-781.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*: Springer publishing company.
- Lemmon, M. K. M., & Chartrand, M. (2009). Caring for America's Children. *Pediatrics in Review*, 30(6), e43.
- Lester, L., Waters, S., Spears, B., Epstein, M., Watson, J., & Wenden, E. (2015). Parenting adolescents: Developing strategies for FIFO parents. *Journal of Child and Family Studies*, 24(12), 3757-3766.
- Lester, L., Watson, J., Waters, S., & Cross, D. (2016). The association of fly-in fly-out employment, family connectedness, parental presence and adolescent wellbeing. *Journal of Child and Family Studies*, 25(12), 3619-3626.
- Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C., . . . Wilt, K. (2010). The long war and parental combat deployment: Effects on military children and at-home spouses. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(4), 310-320.
- Logan, K. V. (1987). *The emotional cycle of deployment*. Paper presented at the US Naval Institute Proceedings.
- Luthar, S. S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (pp. 740–795): New York: Wiley.
- Lyonette, C., Barnes, S.-A., Kispeter, E., Fisher, N., & Newell, K. (2018). Military spousal/partner employment: Identifying the barriers and support required. Retrieved from <https://aff.org.uk/wp/wp-content/uploads/2018/06/employment-research-report-ONLINE-COPY.pdf>.
- MacEachren, A. M., & Kraak, M.-J. (2001). Research challenges in geovisualization. *Cartography and geographic information science*, 28(1), 3-12.

- Maguire, K. C., Heinemann-LaFave, D., & Sahlstein, E. (2013). "To be so connected, yet not at all": Relational presence, absence, and maintenance in the context of a wartime deployment. *Western Journal of Communication*, 77(3), 249-271.
- Mahnken, J. D., Chen, X., Brown, A. R., Vidoni, E. D., Billinger, S. A., & Gajewski, B. J. (2014). Evaluating Variables as Unbiased Proxies for Other Measures: Assessing the Step Test Exercise Prescription as a Proxy for the Maximal, High-Intensity Peak Oxygen Consumption in Older Adults. *International journal of statistics and probability*, 3(4), 25.
- Mansfield, A. J., Kaufman, J. S., Marshall, S. W., Gaynes, B. N., Morrissey, J. P., & Engel, C. C. (2010). Deployment and the use of mental health services among US Army wives. *New England Journal of Medicine*, 362(2), 101-109.
- Marek, L. I., & Moore, L. E. (2015). Coming home: the experiences and implication of reintegration for military families. *Journal of Military, Veteran and Family Health*, 1(2), 21-31.
- Marks, N. (2011). *The happiness manifesto: how nations and people can nurture well-being*: TED books.
- Maxcy, S. J. (2003). Pragmatic threads in mixed methods research in the social sciences: The search for multiple modes of inquiry and the end of the philosophy of formalism. *Handbook of mixed methods in social and behavioral research*(51-89).
- Maxwell, J. A. (2008). Designing a qualitative study. *The SAGE handbook of applied social research methods*, 2, 214-253.
- McCall, G., & Simmons, J. (1978). *Identities and interactions*. New York.
- McCubbin, H. I., & Patterson, J. M. (1983). The family stress process: The double ABCX model of adjustment and adaptation. *Marriage & family review*, 6(1-2), 7-37.
- McGarty, C., Turner, J. C., Hogg, M. A., David, B., & Wetherell, M. S. (1992). Group polarization as conformity to the prototypical group member. *British Journal of Social Psychology*, 31(1), 1-19.
- Meadows, S. O., Griffin, B. A., Karney, B. R., & Pollak, J. (2016). Employment gaps between military spouses and matched civilians. *Armed Forces & Society*, 42(3), 542-561.
- Meadows, S. O., Tanielian, T., Karney, B. R., Ayer, L., Chandra, A., Friedman, E. M., . . . Schell, T. L. (2016). *The deployment life study: Longitudinal analysis of military families across the deployment cycle*. Retrieved from
- Mederer, H., & Barker, C. (2000). Reconstructing identities, families, communities, and futures in the wake of fisheries regulation. *Change and resilience in fishing*. Oregon State University Press, Corvallis, Oregon, USA, 69-81.
- Michaelson, J. (2013). Forward from Foresight: the uses of the new economics foundation's well-being work. *Journal of Public Mental Health*.
- Miller, K. E., Koffel, E., Kramer, M. D., Erbes, C. R., Arbisi, P. A., & Polusny, M. A. (2018). At-home partner sleep functioning over the course of military deployment. *Journal of Family Psychology*, 32(1), 114.

- Miller, L. R. (2016). Definition of family. *Encyclopedia of Family Studies*, 1-7.
- MOD. (2015). Tri-service families continuous attitude survey: 2015. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/449607/Tri-Service_families_continuous_attitude_survey_2015_main_report.pdf.
- MOD. (2016a). *Armed Forces Covenant*. London: Ministry of Defence UK Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/578212/20161215-The-Armed-Forces-Covenant.pdf
- MOD. (2016b). Tri-service families continuous attitude survey: 2016. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/540808/Tri-Service_Families_Continuous_Attitude_Survey_2016_Main_Report.pdf.
- MOD. (2016c). UK Armed Forces Families' Strategy 2016-2020. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/492121/20160108-UK_Armed_Forces_Families_Strategy_2016.pdf.
- MOD. (2017). UK Tri-Service Families Continuous Attitude Survey Results 2017 Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/632455/Tri-Service_Families_Continuous_Attitude_Survey_2017_Main_report.pdf.
- MOD. (2018a). Flexible Working and You: A Guide for Service Personnel. Retrieved from https://nff.org.uk/wp-content/uploads/2018/02/2920_17RD-Flexi-Working-Bklt-003.pdf.
- MOD. (2018b). Location of all UK regular service and civilian personnel quarterly statistics: index. Retrieved from <https://www.gov.uk/government/collections/location-of-all-uk-regular-service-and-civilian-personnel-quarterly-statistics-index>
- MOD. (2018c). The Service Pupil Premium: what you need to know. Retrieved from <https://www.gov.uk/government/publications/the-service-pupil-premium/service-pupil-premium-what-you-need-to-know>
- MOD. (2018d). UK Tri-Service Families Continuous Attitude Survey Results 2018 Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728466/Tri-Service_Families_Continuous_Attitude_Survey_2018_Main_Report.pdf.
- MOD. (2019a). The Armed Forces Covenant Annual Report 2019. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/854400/6.6025_MOD_Covenant_Annual_Report_2019_Accessible.pdf.
- MOD. (2019b). Armed Forces Covenant: guidance and support. Retrieved from <https://www.gov.uk/government/collections/armed-forces-covenant-supporting-information>.
- MOD. (2019c). JSP 100 Defence Holistic Transition Policy. Part 1 & Part 2 Combined: Directive and Guidance. Retrieved from

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/864875/20191028_JSP_100_V1.0_Oct_2019_-_Final.pdf.

- MOD. (2019d). Tri-service families continuous attitude survey: 2019. Retrieved from <https://www.ctp.org.uk/assets/x/54306>.
- MOD. (2019e). UK Regular Armed Forces Continuous Attitude Survey Results 2019. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/811689/Armed_Forces_Continuous_Attitude_Survey_2019_Main_Report.pdf.
- MOD. (2019f). UK Tri-Service Families Continuous Attitude Survey Results 2019. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/819929/Tri-Service_Families_Continuous_Attitude_Survey_2019_Main_Report.pdf.
- MOD. (2020a). Flexible Service in the armed forces. Retrieved from <https://www.gov.uk/government/publications/flexible-engagements-system-what-you-need-to-know/what-you-need-to-know-about-the-flexible-engagements-system>.
- MOD. (2020b). Forces Help to Buy: help to get on the property ladder. Retrieved from <https://www.gov.uk/guidance/forces-help-to-buy>.
- MOD. (2020c). JSP 464 Tri-Service Accommodation Regulations Volume 4: Future Accommodation Model (FAM) Pilot - UK. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/877034/20200401_-_JSP_464_Volume_4_Part_1_-_FAM_Pilot_Policy_v3_.pdf.
- MOD. (2020d). JSP 752 Tri-Service Regulations for Expenses and Allowances. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878289/20200401-JSP_752_v42_Apr_2020_1_v2.pdf.
- MOD. (2020e). Service family accommodation. Retrieved from <https://www.gov.uk/guidance/defence-infrastructure-organisation-service-family-accommodation#overview>.
- MOD. (2020f). UK Armed Forces Quarterly Service Personnel Statistics: 1 April 2020. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902903/1_April_2020.pdf.
- MOD. (2020g). UK Tri-Service Families Continuous Attitude Survey Results 2020. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/903296/Tri-Service_Families_Continuous_Attitude_Survey_2020_Main_Report.pdf.
- MOD. (2020h). What you need to know about the Future Accommodation Model. Retrieved from <https://www.gov.uk/government/publications/future-accommodation-model-what-you-need-to-know/what-you-need-to-know-about-fam>.

- MOD, & Cabinet Office. (2018). Policy Paper: Strategy for Our Veterans. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/755915/Strategy_for_our_Veterans_FINAL_08.11.18_WEB.pdf.
- Moelker, R., Andres, M., Bowen, G., & Manigart, P. (2015). *Military families and war in the 21st century: Comparative perspectives*: Routledge.
- Moore, D. S., Notz, W. I., & Notz, W. (2006). *Statistics: Concepts and controversies*: Macmillan.
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of mixed methods research*, 1(1), 48-76.
- Morgan, D. L. (2013). *Integrating qualitative and quantitative methods: A pragmatic approach*: Sage publications.
- Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative inquiry*, 20(8), 1045-1053.
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing research*, 40(2), 120-123.
- MRC. (2004). *MRC Ethics Guide: Medical Research Involving Children*. Retrieved from <https://mrc.ukri.org/documents/pdf/medical-research-involving-children/>
- Mullen, B., Brown, R., & Smith, C. (1992). Ingroup bias as a function of salience, relevance, and status: An integration. *European Journal of Social Psychology*, 22(2), 103-122.
- Munson, C., & Daley, J. G. (2013). *Social Work Practice in the Military*: Routledge.
- Myers, D. G. (2003). Close relationships and quality of life. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: Foundations of hedonic psychology* (pp. 374–391): Russell Sage Foundation.
- Nadelson, S., & Nadelson, L. S. (2014). Evidence-based practice article reviews using CASP tools: a method for teaching EBP. *Worldviews on Evidence-Based Nursing*, 11(5), 344-346.
- Neil, K. C., & Neis, B. (2020). "Mobility Has Always Been a Part of My Life": Work-related Mobility and Families in Canada. *Canadian Studies in Population*, 1-8.
- New Economics Foundation. (2012). *Measuring Wellbeing: A guide for practitioners*. Retrieved from London: New Economics Foundation: https://oscarkilo.org.uk/app/uploads/2017/06/Measuring_well-being_handbook_FINAL.pdf
- Ngune, I., Jiwa, M., Dadich, A., Lotriet, J., & Sriram, D. (2012). Effective recruitment strategies in primary care research: a systematic review. *Quality in Primary Care*, 20(2), 115-123.
- O'Connor, A., Jackson, L., Goldsmith, L., & Skirton, H. (2014). Can I get a retweet please? Health research recruitment and the Twittersphere. *Journal of advanced nursing*, 70(3), 599-609.

- Oakes, P. J. (1987). The salience of social categories. *Rediscovering the social group: A self-categorization theory*, 117-141.
- Oblea, P. N., Badger, T. A., & Hopkins-Chadwick, D. L. (2016). Effect of short-term separation on the behavioral health of military wives. *Journal of Psychosocial Nursing and Mental Health Services*, 54(6), 45-51. doi:10.3928/02793695-20160518-07
- Office for National Statistics. (2014a). 2011 Census analysis: What does the 2011 Census tell us about concealed families living in multi-family households in England and Wales? Retrieved from <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/articles/2011censusanalysis/2014-02-06#:~:text=Where%20there%20is%20more%20than,primary%20family%20in%20the%20household.>
- Office for National Statistics. (2014b). 2011 Census: Armed Forces statistics for local authorities in England and Wales. Retrieved from <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/2011censusarmedforcesstatisticsforlocalauthoritiesinenglandandwales>
- Ofsted. (2011). The quality and impact of partnership provision for children in Service families. *Children in Service Families*. Retrieved from <https://www.britishlegion.org.uk/media/2275/2014householdsurveyreport.pdf>.
- Onwuegbuzie, A. J. (2012). Introduction: Putting the MIXED back into quantitative and qualitative research in educational research and beyond: Moving toward the radical middle. *International Journal of Multiple Research Approaches*, 6(3), 192-219.
- Orthner, D. K., & Rose, R. (2009). Work separation demands and spouse psychological well-being. *Family Relations*, 58(4), 392-403.
- Orthner, D. K., Rose, R., Family, U. S. A., Morale, W., & Command, R. (2005). *SAF V Survey Report: Adjustment of Army Children to Deployment Separations*: U.S. Army Family and MWR Programs.
- Ortiz, Y., Suárez-Villa, M., & Expósito, M. (2017). Importance and Recognition of the Family in Health Care: A Reflection for Nursing. *Nurse Care Open Acces J*, 3(5), 00084.
- Padden, D. L., Connors, R. A., & Agazio, J. G. (2011). Stress, coping, and well-being in military spouses during deployment separation. *Western Journal of Nursing Research*, 33(2), 247-267.
- Palmer, C. (2008). A theory of risk and resilience factors in military families. *Military Psychology*, 20(3), 205.
- Pansiri, J. (2005). Pragmatism: A methodological approach to researching strategic alliances in tourism. *Tourism and Hospitality Planning & Development*, 2(3), 191-206.
- Parkes, K. R., Carnell, S. C., & Farmer, E. L. (2005). 'Living two lives' Perceptions, attitudes and experiences of spouses of UK offshore workers. *Community, Work and Family*, 8(4), 413-437.

- Patzel, B., McBride, M., Bunting, J., & Anno, T. (2013). Life goes on: The experiences of wives of multiply-deployed National Guard soldiers. *Issues in mental health nursing, 34*(5), 368-374.
- Peebles-Kleiger, M. J., & Kleiger, J. H. (1994). Re-integration stress for Desert Storm families: Wartime deployments and family trauma. *Journal of Traumatic Stress, 7*(2), 173-194.
- Perlman, D., & Peplau, L. A. (1982). Theoretical approaches to loneliness. *Loneliness: A sourcebook of current theory, research and therapy*, 123-134.
- Perlman, D., & Peplau, L. A. (1998). Loneliness. *Encyclopedia of mental health, 2*, 571-581.
- Perrucci, R., MacDermid, S., King, E., Tang, C.-Y., Brimeyer, T., Ramadoss, K., . . . Swanberg, J. (2007). The significance of shift work: Current status and future directions. *Journal of Family and Economic Issues, 28*(4), 600-617.
- Perry-Jenkins, M., Repetti, R. L., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of marriage and family, 62*(4), 981-998.
- Petticrew, M. (2001). Systematic reviews from astronomy to zoology: myths and misconceptions. *Bmj, 322*(7278), 98-101.
- Pincus, S. H., House, R., Christenson, J., & Adler, L. E. (2001). The emotional cycle of deployment: A military family perspective. *US Army Medical Department Journal, 4*(5), 6.
- Pittman, J. F., Kerpelman, J. L., & McFadyen, J. M. (2004). Internal and external adaptation in army families: Lessons from Operations Desert Shield and Desert Storm. *Family Relations, 53*(3), 249-260.
- Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International journal of nursing studies, 47*(11), 1451-1458.
- Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., . . . Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. *A product from the ESRC methods programme Version, 1*, b92.
- Pope, C., Ziebland, S., & Mays, N. (2000). Analysing qualitative data. *British medical journal, 320*(7227), 114.
- PRISMA. (2015). PRISMA Checklist. Retrieved from <http://www.prisma-statement.org/PRISMAStatement/Checklist>
- Qualter, P., Vanhalst, J., Harris, R., Van Roekel, E., Lodder, G., Bangee, M., . . . Verhagen, M. (2015). Loneliness across the life span. *Perspectives on Psychological Science, 10*(2), 250-264.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied psychological measurement, 1*(3), 385-401.
- RAF Families Federation. (2019a). RAF DISPERSED FAMILIES: Summary Briefing Paper. Retrieved from <https://www.raf-ff.org.uk/wp-content/uploads/2020/01/RAF-Dispersed-Families-summary-briefing-paper-Jan-20.pdf>.

- RAF Families Federation. (2019b). Survey Snapshot: Benefits and Challenges of Dispersed Living. Retrieved from <https://www.raf-ff.org.uk/wp-content/uploads/2019/02/Dispersed-Families-FOR-WEB.pdf>.
- Rainer, J. P., & Martin, J. (2013). *Isolated and alone: Therapeutic interventions for loneliness*: Professional Resource Press.
- Ray, L. (2004). Pragmatism and critical theory. *European Journal of Social Theory*, 7(3), 307-321.
- Richman, W. L., Kiesler, S., Weisband, S., & Drasgow, F. (1999). A meta-analytic study of social desirability distortion in computer-administered questionnaires, traditional questionnaires, and interviews. *Journal of applied Psychology*, 84(5), 754.
- Riggs, S. A., & Riggs, D. S. (2011). Risk and resilience in military families experiencing deployment: The role of the family attachment network. *Journal of Family Psychology*, 25(5), 675.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers*: sage.
- Ritchie, J., & Spencer, L. (2002). Qualitative data analysis for applied policy research. *The qualitative researcher's companion*, 573(2002), 305-329.
- Rodrigues, M., Osborne, A. K., Johnson, D., & Kiernan, M. D. (2020). The exploration of the dispersal of British military families in England following the Strategic Defence and Security Review 2010. *PloS one*, 15(9), e0238508.
- Rorty, R. M., & Rorty, R. (1999). *Philosophy and social hope*: Penguin UK.
- Rosch, E., & Lloyd, B. B. (1978). *Cognition and categorization*.
- Rosen, S. P. (1995). Military effectiveness: Why society matters. *International Security*, 19(4), 5-31.
- Rosenfeld, D. (2010). » Schießt der Papa auch auf Menschen?«. *Die Zeit*, 29.
- Ross, J. K. (2009). Offshore industry shift work—health and social considerations. *Occupational Medicine*, 59(5), 310-315.
- Rossetto, K. R. (2015). Developing conceptual definitions and theoretical models of coping in military families during deployment. *Journal of Family Communication*, 15(3), 249-268.
- Rousseau, D. M. (2012). *The Oxford handbook of evidence-based management*. Oxford University Press.
- Royal Navy and Royal Marines Children's Fund. (2009). The overlooked casualties of conflict. Retrieved from https://www.basw.co.uk/system/files/resources/basw_20618-1_0.pdf.
- Russell, D., Cutrona, C. E., Rose, J., & Yurko, K. (1984). Social and emotional loneliness: an examination of Weiss's typology of loneliness. *Journal of personality and social psychology*, 46(6), 1313.
- Russell, R., Chung, M., Balk, E. M., Atkinson, S., Giovannucci, E. L., Ip, S., . . . Trikalinos, T. (2009). Issues and Challenges in Conducting Systematic Reviews

to Support Development of Nutrient Reference Values: Workshop Summary: Nutrition Research Series, Vol. 2. Chapter 2: Systematic Review Methods.

- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and psychosomatics*, 83(1), 10-28.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, 69(4), 719.
- Ryff, C. D., & Singer, B. H. (2006). Best news yet on the six-factor model of well-being. *Social Science Research*, 35(4), 1103-1119.
- Sapranaviciute-Zabazlajeva, L., Reklaitiene, R., Tamosiunas, A., Baceviciene, M., Virviciute, D., & Peasey, A. (2014). Correlates of depressive symptoms in urban middle-aged and elderly Lithuanians. *Social Psychiatry and Psychiatric Epidemiology*, 49(8), 1199-1207.
- Selous, A., Walker, J., & Misca, G. (2020). Living in Our Shoes: Understanding the needs of the UK Armed Forces families. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/895236/Living_in_our_shoes_Full_Report_1_embargoed_30_June.pdf.
- Sharkansky, E. J., King, D. W., King, L. A., Wolfe, J., Erickson, D. J., & Stokes, L. R. (2000). Coping with Gulf War combat stress: Mediating and moderating effects. *Journal of Abnormal Psychology*, 109(2), 188.
- Shumaker, S. A., & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. *Journal of social issues*, 40(4), 11-36.
- Siebler, P. (2003). *Supporting Australian Defence Force peacekeepers and their families: the case of East Timor*. Retrieved from
- Sinokki, M., Hinkka, K., Ahola, K., Koskinen, S., Kivimäki, M., Honkonen, T., . . . Virtanen, M. (2009). The association of social support at work and in private life with mental health and antidepressant use: the Health 2000 Study. *Journal of affective disorders*, 115(1-2), 36-45.
- Skomorovsky, A. (2014). Deployment stress and well-being among military spouses: The role of social support. *Military Psychology*, 26(1), 44-54.
- Smith, V., Devane, D., Begley, C. M., & Clarke, M. (2011). Methodology in conducting a systematic review of systematic reviews of healthcare interventions. *BMC medical research methodology*, 11(1), 1-6.
- Snowden, M., Dhingra, S. S., Keyes, C. L., & Anderson, L. A. (2010). Changes in mental well-being in the transition to late life: Findings from MIDUS I and II. *American Journal of Public Health*, 100(12), 2385-2388.
- Somasundaram, R., & Nedunchezian, R. (2011). Evaluation of three simple imputation methods for enhancing preprocessing of data with missing values. *International Journal of Computer Applications*, 21(10), 14-19.

- Srivastava, A., & Thomson, S. B. (2009). Framework analysis: a qualitative methodology for applied policy research.
- Stapleton, M. (2018). Loneliness and social isolation in The Armed Forces community. *The Royal British Legion, London*.
- Stent, W. A. (2014a). The Adaptation of the Family System to Separation and Reunion: An exploratory study of military families. Retrieved from https://ir.canterbury.ac.nz/bitstream/handle/10092/10094/thesis_fulltext.pdf?sequence=1.
- Stent, W. A. (2014b). The Adaptation of the Family System to Separation and Reunion: An exploratory study of military families. Retrieved from: https://ir.canterbury.ac.nz/bitstream/handle/10092/10094/thesis_fulltext.pdf?sequence=1.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social psychology quarterly*, 224-237.
- Stoll, L., Michaelson, J., & Seaford, C. (2012). *Well-being evidence for policy: A review*. New Economics Foundation.
- Stryker, S. (1968). Identity salience and role performance: The relevance of symbolic interaction theory for family research. *Journal of Marriage and the Family*, 558-564.
- Stuhr, J. J. (1999). Pragmatism and classical American philosophy: essential readings and interpretive essays.
- Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*: Cup Archive.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *Organizational identity: A reader*, 56, 65.
- Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *JRSM short reports*, 4(6), 2042533313479197.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioral research*: Sage.
- Tashakkori, A., Teddlie, C., & Teddlie, C. B. (1998). *Mixed methodology: Combining qualitative and quantitative approaches* (Vol. 46): Sage.
- Taylor, J., & Simmonds, J. (2009). Family stress and coping in the fly-in fly-out workforce. *The Australian Community Psychologist*, 21(2), 23-36.
- Thandi, G., Greenberg, N., Fear, N., & Jones, N. (2017). Perceived effect of deployment on families of UK military personnel. *Occupational Medicine*, 67(7), 562-568.
- The Center for Government Excellence. (2020). Benchmarking. Retrieved from <https://centerforgov.gitbooks.io/benchmarking/content/Proxy.html>
- Thelwell, R., Weston, N. J., & Greenlees, I. (2010). Coping with stressors in elite sport: A coach perspective. *European journal of sport science*, 10(4), 243-253.

- Thoits, P., & Vishup, L. (1997). Me's and We's: Forms and Functions of Social Identities. *Self and Identity: Fundamental Issues*, 106-133.
- Thompson, M. M., & Pasto, L. (2001). *Psychometric assessment and refinement of the Family Issues scale of the Human Dimensions of Operations (HDO) project*. Retrieved from
- Thompson, S., & Marks, N. (2008). *Measuring well-being in policy: issues and applications*. Retrieved from https://b.3cdn.net/nefoundation/575659b4f333001669_ohm6iioqp.pdf
- Tiffany, J. S. (2006). Respondent-driven sampling in participatory research contexts: Participant-driven recruitment. *Journal of Urban Health*, 83(1), 113-124.
- Topolovec-Vranic, J., & Natarajan, K. (2016). The use of social media in recruitment for medical research studies: a scoping review. *Journal of medical Internet research*, 18(11), e286.
- Torkington, A. M., Larkins, S., & Gupta, T. S. (2011). The psychosocial impacts of fly-in fly-out and drive-in drive-out mining on mining employees: A qualitative study. *Australian Journal of Rural Health*, 19(3), 135-141.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, 14(3), 207-222.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- van Dulmen, M. H., & Goossens, L. (2013). Loneliness trajectories. In: Elsevier.
- Van Winkle, E. P., & Lipari, R. N. (2015). The impact of multiple deployments and social support on stress levels of women married to active duty servicemen. *Armed Forces & Society*, 41(3), 395-412.
- Veenhoven, R. (2008). Sociological theories of subjective well-being. *The science of subjective well-being*, 9, 44-61.
- Verey, A., & Fossey, M. (2013). Report on Geographically Dispersed Families. Retrieved from <https://aff.org.uk/wp/wp-content/uploads/2018/02/geographicallydispersedfinalrepro.pdf>.
- Visentin, D. C., Cleary, M., & Hunt, G. E. (2020). The earnestness of being important: Reporting non-significant statistical results. *Journal of advanced nursing*, 76(4), 917-919.
- Voydanoff, P. (2005). Work demands and work-to-family and family-to-work conflict: Direct and indirect relationships. *Journal of Family Issues*, 26(6), 707-726.
- Wahrendorf, M., & Siegrist, J. (2010). Are changes in productive activities of older people associated with changes in their well-being? Results of a longitudinal European study. *European Journal of Ageing*, 7(2), 59-68.
- Warner, C. H., Appenzeller, G. N., Warner, C., & Grieger, T. (2009). Psychological effects of deployments on military families. *Psychiatric Annals*, 39(2).

- Warr, P. (2003). Well-being in the workplace. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: Foundations of hedonic psychology* (pp. 392–412): Russell Sage Foundation.
- Weiss, E. L., Hino, D., Canfield, J., & Albright, D. L. (2017). Military families: Strengths and concerns: Reintegration and beyond. In J. Beder (Ed.), *Caring for the military: A guide for helping professionals* (pp. 72–92). New York: Routledge.
- Weiss, R. S. (1973). Loneliness: The experience of emotional and social isolation.
- Whalen, H., & Schmidt, G. (2016). The women who remain behind: challenges in the LDC lifestyle. *Rural Society*, 25(1), 1-14.
- White, C. J., de Burgh, H. T., Fear, N. T., & Iversen, A. C. (2011). The impact of deployment to Iraq or Afghanistan on military children: A review of the literature. *International Review of Psychiatry*, 23(2), 210-217.
- Wills, T. A., & Shinar, O. (2000). Measuring perceived and received social support. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention* (pp. 86–135). New York: Oxford University Press.
- Wilson, G., Hill, M., & Kiernan, M. D. (2018). Loneliness and social isolation of military veterans: systematic narrative review. *Occupational Medicine*, 68(9), 600-609.
- Wilson, G., Leslie, C., McGill, G., & Kiernan, M. (2019). *Understanding Unique Factors of Social Isolation and Loneliness of Military Veterans*. Retrieved from https://researchportal.northumbria.ac.uk/files/21176945/Wilson_Leslie_McGill_Kiernan_Understanding_Unique_Factors_of_Social_Isolation_and_Loneliness_of_Military_Veterans_2019_.pdf
- Woodward, R., & Neil Jenkins, K. (2011). Military identities in the situated accounts of British military personnel. *Sociology*, 45(2), 252-268.
- Yefimov, V. (2004). On pragmatist institutional economics.
- Yin, R. K. (2006). Mixed methods research: Are the methods genuinely integrated or merely parallel. *Research in the Schools*, 13(1), 41-47.
- Yu, C. H. (2006). Philosophical foundations of quantitative research methodology.
- Zvonkovic, A. M., Solomon, C. R., Humble, Á. M., & Manoogian, M. (2005). Family work and relationships: Lessons from families of men whose jobs require travel. *Family Relations*, 54(3), 411-422.

Appendices

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Professional Development and Research Training

| Event | Date Completed |
|---|-----------------------|
| Northumbria University Health and Life Sciences Faculty Induction | 05-Oct-17 |
| Developing your Academic Writing | 17-Oct-17 |
| Introduction to Searching for Your Literature Review | 31-Oct-17 |
| Introduction to Mind Mapping for Researchers | 31-Oct-17 |
| Shaping the Future Conference 2017 | 16-Nov-17 |
| Overview of the Research Excellence Framework (REF) | 06-Feb-18 |
| Northumbria University: Research Ethics Training | 13-Feb-18 |
| First Steps in PhD Thesis Writing Webinar | 14-Feb-18 |
| Defence Research Network Collaboration Workshop | 28-Feb-18 |
| Careers in Academia | 15-Mar-18 |
| Learn how to harness the capabilities of Cited Reference | 23-Apr-18 |
| Pitch Perfect: Delivering Better Presentations | 24-Apr-18 |
| To Tweet or not To Tweet: Social Media for Researchers | 24-Apr-18 |
| Build reports to identify research trends using powerful analytical tools in the Web of Science Core Collection | 25-Apr-18 |
| Quickly discover over 310K of associated data within the Web of Science Core Collection | 26-Apr-18 |
| How to be a word ninja: Tips for thesis formatting | 29-Jun-18 |
| Northumbria University Health and Life Sciences Post Graduate Research Conference | 29-Jun-18 |
| From Evidence to Action: SCiP Alliance Annual Conference 2018 | 08-Oct-18 |
| Forces in Mind Trust Conference | 11-Oct-18 |
| The Lean PhD | 19-Oct-18 |
| Researcher Resilience | 11-Nov-18 |
| ASDIC Conference | 13-Nov-18 |
| Research Philosophies and Paradigms | 27-Nov-18 |
| Reality Check: Maintaining motivation throughout your doctorate | 28-Nov-18 |
| An introduction to academic publishing (online) | 10-Jan-19 |
| Armed Forces Covenant Fund Trust Families In Stress Event | 16-Jan-19 |
| Government's Armed Forces Covenant Inquiry | 24-Jan-19 |
| Home Start UK report for Army Central Fund on Working with Military Families | 06-Mar-19 |
| Northumbria University Health and Life Sciences Early Career Research Forum - Collaborative Research and Development: Opportunities with Industry | 24-Mar-19 |
| Covenant in the Community Conference | 30-May-19 |
| British Psychological Society's Annual Conference | 02-May-19 |

| Event | Date Completed |
|--|-----------------------|
| Help for Heroes Information and Networking Event | 15-May-19 |
| Bringing the Armed Forces Covenant to Life | 19-Jun-19 |
| SCiP Alliance Research Symposium | 24-Jul-19 |
| Northumbria University Health and Life Sciences Early Career Research Conference | 27-Jun-19 |
| RCET Practitioner's Conference: Supporting Confident Journeys | 05-Nov-19 |
| Introduction to Adverse Childhood Experiences (ACEs) and Early Trauma | 15-Nov-19 |
| Networking and Making the Most out of Conferences | 15-Nov-19 |
| An Introduction to Research Management for Postgraduate Researchers | 15-Nov-19 |
| Defence and Security Psychology in the 21st Century | 28-Nov-19 |
| North East Veteran's Network Forum | 27-Feb-20 |
| PGR Ethics Reviewer Training | 23-Mar-20 |
| Preparing for the Viva: The End is in Sight | 24-Mar-20 |
| Annual Progression: Preparing for the Panel | 12-May-20 |

Geographically Dispersed Military Families
Exploring the Psycho-Social Impact of Intermittent Separation

Alison K Osborne (PhD Researcher: alison.osborne2@northumbria.ac.uk), Dr Gemma Wilson, Dr Matthew D Kiernan, Dr Michael Rodrigues

Background

- Perceived role and identity of the military family is shifting. New policies and models from MOD aim to increase flexibility and encourage stability.
- Approx. 24% of military families are living geographically dispersed from the serving family member¹⁻²
- Central to dispersed military family life is intermittent separation.
- Research primarily focusses on impact of operational deployments on spouses and children³⁻⁶
- Reasons for living geographically dispersed: educational stability, spousal employment, wider family support⁷

AIM To explore the psycho-social impact of intermittent separation on geographically dispersed military families

Method

Following a mixed methods approach, a two-phase Explanatory Sequential Design⁸ was utilised with two phases.

Phase 1a
Systematic Narrative Review

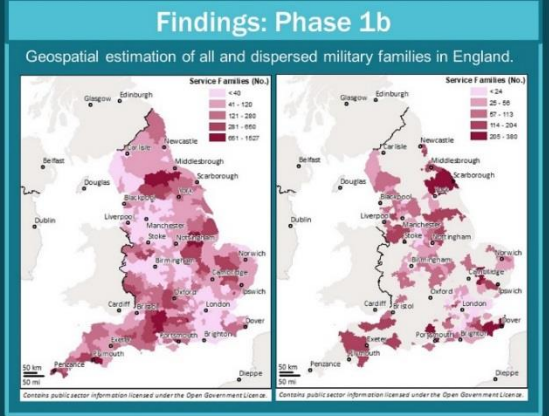
Phase 1b
Secondary Data Analysis

Phase 2
Semi-Structured Interviews

1a: Search items developed using PICO Framework⁹ and CASP tool¹⁰ used to assess quality. RQ - How does separation impact military families?
 1b: Publicly available data used to estimate location of military families (Service Pupil Premium, ONS Fertility Rates, Location of Stationed Personnel).
 2: Semi-structured interviews with approx. 30 dispersed family members (spouses, partners and children of UK Armed Forces personnel).

Findings: Phase 1a

- Psychological well-being changes across a separation period (e.g. deployment) with specific increases in stress¹¹⁻¹⁴, depression¹⁵⁻¹⁶ and anxiety symptoms¹⁷
- Deployment was credited with personal growth, prompting family members to cultivate their skill, talent and autonomy¹⁸
- Social support often mitigates the psychological effects of military-induced separations^{16,19-21}
- Higher levels of social support were significantly associated with better psychological health²¹, higher levels of relationship satisfaction¹¹, fewer depressive symptoms²¹, and lower levels of stress^{20,22}



Findings: Phase 2

Semi-structured interviews with civilian partners, spouses and children of UK Armed Forces personnel aged 16+. Lived dispersed within last 2 years.

Identity
Acceptance
Isolation
Stability

Single Parent
No Formal Support
Independence
Emotional Growth
Compromise
Poor Communication
Separation Anxiety
Uncertainty

Stress
Loneliness

Low Mood
Lack of Understanding

Resilience

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References

1. MOD (2015). The service families continuity advice survey 2015. Retrieved from www.mod.gov.uk/press-releases/press-releases/2015/06/01/2015-06-01-01

2. MOD (2015). The service families continuity advice survey 2015. Retrieved from www.mod.gov.uk/press-releases/press-releases/2015/06/01/2015-06-01-01

3. Thomas, C., Cochrane, S., Fair, N., & Lewis, N. (2017). Perceived effects of operational separations on the military personnel. *Occupational Medicine: State of the Art Reviews*, 62(4), 242-249.

4. Ross, R. A., & Sells, D. B. (2011). Risk and resilience in military families experiencing deployment: The role of other family members. *Journal of Family Psychology*, 25(2), 197-204.

5. Fergusson, J. M. (2011). Resilience: Conceptualizations and theoretical models of coping in military families during deployment. *Journal of Family Psychology*, 25(2), 197-204.

6. Fergusson, J. M., & Fair, N. J. (2011). The impact of deployment in Iraq or Afghanistan on military (United States) and their family members. *Journal of Family Psychology*, 25(2), 197-204.

7. Department of Defense (2015). *Operation Enduring Freedom: Military Operations in Afghanistan*. Retrieved from www.defense.gov

8. Creswell, J. W., & Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (8th ed.). Thousand Oaks, CA: Sage.

9. PICO (2015). *PICO: A mnemonic for formulating research questions*. Retrieved from www.cochrane.org

10. CASP (2017). *CASP checklist for qualitative research*. Retrieved from www.casp-uk.org

11. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

12. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

13. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

14. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

15. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

16. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

17. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

18. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

19. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

20. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

21. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

22. DeLongis, A. M., & Folkman, S. (1988). The role of purpose in life and personal growth in positive human health. *Journal of Personality and Social Psychology*, 54(2), 248-258.

Poster Presentation Abstract for Conference

Objectives: To explore the psycho-social impact of intermittent separation on geographically dispersed military families.

Design: Following a mixed methods approach, an Explanatory Sequential Design was utilised, with two phases. The purpose of this design was to identify what is already known about the impact of separation on military families and use this to inform a semi-structured interview schedule for empirical study.

Methods: Phase 1 consisted of a systematic narrative review of existing literature on the impact of separation on military families and geospatial analysis of publicly available data as a proxy to estimate the location of military families in England. Semi-structured interviews formed phase 2 with dispersed civilian partners/spouses and children of UK Armed Forces personnel over the age of 16.

Results: Phase 1 indicated that military families experience changes in their psychological well-being during military-induced separations with specific increases in stress, depression, and anxiety symptoms. Communication and relationships are also affected, but social support can mitigate the psychological effects of separations. Higher levels of social support were significantly associated with better psychological health, fewer depressive symptoms, and lower levels of stress. In England, approximately 22.2% of military families are living dispersed from the serving member of their family. Phase 2 is ongoing, but indicates a dialogue around stress, loneliness, identity, stability, growth and a lack of understanding or support.

Conclusions: By gaining a greater understanding of the impact of separation on dispersed military families, recommendations for future policies and practice can be developed to further support these families.

Data on the Location of Stationed Service Personnel: UK England

There was no data available for 154 out of 281 local authorities in England due to statistical disclosure control. Table D1 shows the top 20 local authorities in England with the greatest number of serving personnel in 2017 as a proxy for the location of military families. Here, the density per km² is also reported.

Table D1. Top 20 local authorities in England with greatest number of serving personnel 2017

| Local Authority | Number of Serving Personnel | Density per Km ² (#Rank) ^a |
|------------------------------|-----------------------------|--|
| Wiltshire | 14800 | 2 (#19) |
| Richmondshire | 6680 | 2 (#29) |
| Portsmouth | 6330 | 42 (#2) |
| Plymouth | 5420 | 6 (#9) |
| West Oxfordshire | 4110 | 3 (#15) |
| North Kesteven | 3900 | 22 (#3) |
| Cornwall | 3160 | <1 (#53) |
| Colchester | 3120 | 2 (#22) |
| South Somerset | 2630 | 1 (#33) |
| Shropshire | 2530 | <1 (#62) |
| Hart | 2470 | 3 (#16) |
| Guildford | 2380 | 9 (#5) |
| East Lindsey | 2050 | <1 (#55) |
| King's Lynn and West Norfolk | 2000 | 1 (#29) |
| Westminster | 1860 | 91 (#1) |
| Harrogate | 1850 | <1 (#60) |
| Vale of White Horse | 1770 | 6 (#8) |
| Fareham | 1730 | 7 (#7) |
| Test Valley | 1620 | 1 (#37) |
| Herefordshire, County of | 1590 | <1 (#61) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person. Note: highlighted rows show the parliamentary constituencies that are in the top 20 for the greatest number of pupils receiving SPP and top 20 for greatest density of service pupils per km²

Although Wiltshire had the largest number of stationed personnel, this local authority also has a large surface area. When ranking local authorities by density of stationed personnel per km², Wiltshire was no longer at the top and dropped to 19th place. As can be seen in Table D1, the distribution of serving personnel in local authorities changed when density was considered. The highlighted rows denote local authorities that appeared in the top 20 for distribution and for density.

In theory, if a local authority was in the top 20 for the number of personnel and for the density of personnel, this would indicate that the local authority had a substantial presence of stationed personnel and subsequently their families. For example, Portsmouth is a large Naval base/port with the third largest number of stationed personnel. The surface area of Portsmouth local authority is actually quite small at 150.74 km² in comparison to other local authorities such as Wiltshire at 8322.41 km². Consequently, there is a greater density of stationed personnel (and their families) per km². Local authorities highlighted in Table D1 indicate areas of specific interest.

Furthermore, the mean density of stationed military personnel in local authorities across England was 0.91 personnel per km², meaning 26 local authorities in England had a greater density of stationed personnel than the national average.

Wales

There was no data available for 12 out of 22 local authorities in Wales due to statistical disclosure control. Table D2 shows the top 10 local authorities in Wales with the greatest number of serving personnel in 2017 as a proxy for the location of military families. Here, the density per km² is also reported.

Table D2. Top 10 local authorities in Wales with greatest number of serving personnel 2017

| Local Authority | Number of Serving Personnel | Density per Km ² (#Rank) ^a |
|-----------------------|-----------------------------|--|
| The Vale of Glamorgan | 990 | 2 (#1) |
| Pembrokeshire | 470 | <1 (#4) |
| Powys | 340 | <1 (#6) |
| Isle of Anglesey | 250 | <1 (#3) |
| Cardiff | 50 | <1 (#2) |
| Wrexham | 20 | <1 (#8) |
| Merthyr Tydfil | 20 | <1 (#5) |
| Swansea | 10 | <1 (#9) |
| Monmouthshire | 10 | <1 (#10) |
| Newport | 10 | <1 (#7) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person.

The location of stationed military personnel and subsequently their families, was quite concentrated in specific areas of Wales. The Vale of Glamorgan was a key area, having the largest number of stationed personnel and the greatest density per km² followed by Cardiff. There was also a presence of stationed personnel in neighbouring areas around the capital of Wales, Cardiff, a major urban area. These figures are likely to increase

following the closure of Cawdor Barracks and rebasing to MOD St Athan in Vale of Glamorgan.

Furthermore, the mean density of stationed military personnel in local authorities across Wales was 0.16 personnel per km², meaning one local authority in Wales had a greater density of stationed personnel than the national average.

Scotland

There was no data available for 16 out of 32 local authorities in Scotland due to statistical disclosure control. Table D3 shows the top 15 local authorities in Scotland with the greatest number of serving personnel in 2017 as a proxy for the location of military families. Here, the density per km² is also reported.

Table D3. Top 15 local authorities in Scotland with greatest number of serving personnel 2017

| Local Authority | Number of Serving Personnel | Density per Km ² (#Rank) ^a |
|--------------------|-----------------------------|--|
| Argyll & Bute | 3240 | <1 (#6) |
| Moray | 2300 | <1 (#4) |
| Edinburgh, City of | 970 | 2 (#2) |
| Fife | 880 | <1 (#5) |
| Angus | 650 | <1 (#8) |
| Glasgow City | 650 | 2 (#1) |
| Highland | 600 | <1 (#11) |
| Midlothian | 520 | <1 (#3) |
| Stirling | 50 | <1 (#10) |
| Aberdeenshire | 20 | <1 (#13) |
| Dundee City | 20 | <1 (#7) |
| Eilean Siar | 10 | <1 (#14) |
| Perth and Kinross | 10 | <1 (#15) |
| South Lanarkshire | 10 | <1 (#12) |
| Aberdeen City | 10 | <1 (#9) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person.

As can be seen in Table the distribution of local authorities changes when density is considered. Argyll and Bute and Moray remained in the top local authorities for distribution and density, despite being some of the larger local authorities in Scotland. Argyll and Bute has a surface area of 22996.50 km² making it the second largest local authority and the sixth with the greatest density of stationed personnel per km². Edinburgh (Capital) and Glasgow were highly densely populated areas in comparison to

the rest of Scotland and this was also reflected in the density of stationed personnel per km².

Furthermore, the mean density of stationed military personnel in local authorities across Scotland was 0.24 personnel per km², meaning four local authorities Scotland had a greater density of stationed personnel than the national average.

Northern Ireland

There was no data available for eight out of 11 local authorities in Northern Ireland due to statistical disclosure control. Table D4 shows the top three local authorities in Northern Ireland with the greatest number of serving personnel in 2017 as a proxy for the location of military families. Here, the density per km² is also reported.

Table D4. Top 3 local authorities in Northern Ireland with greatest number of serving personnel 2017

| Local Authority | Number of Serving Personnel | Density per Km ² (#Rank) ^a |
|-------------------------|-----------------------------|--|
| Lisburn and Castlereagh | 1060 | 1 (#1) |
| Antrim and Newtownabbey | 520 | <1 (#2) |
| Belfast | 20 | <1 (#3) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person.

The top three local authorities remained the same regardless of whether the distribution or density of stationed personnel across Northern Ireland was considered. Unsurprisingly, the top areas centred around the capital, Belfast. Although data was omitted due to statistical disclosure control, this dataset suggests that stationed personnel were not as dispersed across Northern Ireland as they were in other UK countries.

Furthermore, the mean density of stationed military personnel in local authorities across Northern Ireland was 0.09 personnel per km², meaning two local authorities in Northern Ireland had a greater density of stationed personnel than the national average.

Data on Armed Forces Household Reference Persons

England

Wiltshire, Plymouth, North Kesteven remained near the top of the list of local authorities with the greatest number of Armed Force Household Reference Persons, similar to the location of stationed military personnel dataset. This may in part, be due to the availability of Service Family Accommodation in these areas. Interestingly, Cornwall showed up in the top 20. Cornwall hosts their own military connections, home to HMS Raleigh, RNAS Culdrose and RAF St Mawgan. However, it also neighbours Plymouth, a local authority that is known for high numbers of serving personnel (and their families). As both datasets are aggregated at the local authority level, it is difficult to determine where within the local authority serving personnel and families may reside.

Table E1. Top 20 local authorities in England with greatest number of Armed Forces HRPs, 2011

| Local Authority | Number of Armed Forces HRPs | Density per Km ² (#Rank) ^a |
|------------------------------|-----------------------------|--|
| Wiltshire | 5589 | 1 (#40) |
| Plymouth | 2485 | 3 (#10) |
| North Kesteven | 1725 | 10 (#2) |
| Forest Heath | 1713 | 1 (#35) |
| Cornwall | 1580 | <1 (#103) |
| Richmondshire | 1429 | <1 (#89) |
| Portsmouth | 1318 | 9 (#3) |
| Harrogate | 1133 | <1 (#105) |
| Vale of White Horse | 886 | 3 (#7) |
| South Somerset | 848 | <1 (#80) |
| King's Lynn and West Norfolk | 813 | <1 (#64) |
| Huntingdonshire | 812 | 1 (#30) |
| Colchester | 805 | <1 (#62) |
| Herefordshire, County of | 750 | <1 (#123) |
| Test Valley | 743 | <1 (#74) |
| Shropshire | 730 | <1 (#152) |
| West Oxfordshire | 725 | <1 (#59) |
| Fareham | 663 | 3 (#8) |
| Breckland | 633 | <1 (#132) |
| Wycombe | 563 | <1 (#100) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person. Note: highlighted rows show the parliamentary constituencies that are in the top 20 for the greatest number of pupils receiving SPP and top 20 for greatest density of service pupils per km²

As can be seen in Table E1, the distribution of local authorities changed when density was considered. The highlighted rows denote local authorities that appeared in the top 20 for distribution and for density. North Kesteven in the East Midlands is home to tri-service personnel (see Table D1) and in both data sets, stationed personnel, and Armed Forces Household Reference Persons, it appears top for distribution and density. North Kesteven has a smaller surface area at 178.05 km² in comparison to the number of Armed Forces Household Reference Persons (n=1725). Whereas other local authorities in the top 5 for distribution such as Wiltshire (8322.41 km²), Forest Heath (2184.41 km²) and Cornwall (8939.37 km²) all have relatively large surface areas.

Furthermore, the mean density of Armed Forces Household Reference Persons in local authorities across England was 0.43 HRPs per km², meaning 55 LAs in England had a greater density of Armed Forces Household Reference Persons than the national average.

Wales

In comparison to the previous dataset of stationed personnel, it appears the Census 2011 data as a proxy for service families represents a much more dispersed population across Wales. There was no data available for five out of 22 local authorities in Wales due to statistical disclosure control. This was seven more local authorities with data than from the stationed personnel data, further supporting a greater dispersal of military families across Wales. Table E2 shows the top 17 local authorities in Wales with the greatest number of Armed Forces Household Reference Persons according to the 2011 Census as a proxy for the location of military families. Here, the density per km² is also reported.

Table E2 shows a greater dispersal of Armed Forces Household Reference Persons across South Wales followed by North Wales. Contrary to the data on the location of stationed personnel, there was almost no presence of Armed Forces Household Reference Persons in central areas of Wales. There were stationed personnel in Powys (n=340) but no Armed Forces Household Reference Persons (or a very small amount). However, neighbouring local authorities such as Carmarthenshire, Rhondda Cyon Taf, Flintshire, Wrexham and Monmouthshire had a number of Armed Forces Household Reference Persons. This suggests that those who work in Powys may have lived with their families in neighbouring local authorities. Brecon Barracks and Sennybridge Camp and Army Field Training Centre are in Powys but are around one-hour commuting distance from Rhondda Cyon Taff, Carmarthenshire, and Monmouthshire.

Table E2. Top 17 local authorities in Wales with greatest number of Armed Forces HRPs, 2011

| Local Authority | Number of Armed Forces HRPs | Density per Km ² (#Rank) ^a |
|-------------------|-----------------------------|--|
| Vale of Glamorgan | 353 | <1 (#2) |
| Pembrokeshire | 211 | <1 (#12) |
| Cardiff | 209 | 1 (#1) |
| Isle of Anglesey | 203 | <1 (#8) |
| Swansea | 158 | <1 (#6) |
| Rhondda Cyon Taf | 151 | <1 (#7) |
| Carmarthenshire | 150 | <1 (#15) |
| Caerphilly | 124 | <1 (#4) |
| Flintshire | 114 | <1 (#9) |
| Bridgend | 114 | <1 (#3) |
| Wrexham | 107 | <1 (#10) |
| Conwy | 106 | <1 (#14) |
| Monmouthshire | 100 | <1 (#13) |
| Newport | 91 | <1 (#5) |
| Neath Port Talbot | 88 | <1 (#11) |
| Gwynedd | 69 | <1 (#17) |
| Denbighshire | 54 | <1 (#16) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person.

Caerphilly (n=124), Bridgend (n=114) and Newport (n=91) moved from the bottom half of Table to 4th, 3rd, and 5th position respectively when density was considered. This was due to the relatively small surface area of these local authorities, suggesting a greater concentration of military families. Furthermore, the mean density of Armed Forces Household Reference Persons in local authorities across Wales was 0.10 HRPs per km², meaning seven local authorities in Wales had a greater density of Armed Forces Household Reference Persons than the national average.

Data on Service Child Pupil Premium Family Estimate

Table F1 below shows the top 20 parliamentary constituencies and local authorities with the greatest estimate of military families for 2017/18, representing the data in Figure 6. To aid comparison with previous data sets, see Table F2 for data aggregated at LA level.

Table F1. Top 20 parliamentary constituencies in England with the greatest number of estimated military families 2017/18

| Parliamentary Constituency | Local Authority | Number of Families | Density per Km ² (#Rank) ^a |
|----------------------------|-------------------|--------------------|--|
| Devizes | Wiltshire | 1527 | 1 (#36) |
| Richmond (Yorkshire) | Richmondshire | 1225 | <1 (#148) |
| Sleaford and North Hykeham | North Kesteven | 1054 | <1 (#79) |
| Gosport | Fareham | 966 | 10 (#1) |
| Aldershot | Hart | 734 | 6 (#4) |
| Salisbury | Wiltshire | 723 | <1 (#52) |
| South West Devon | Plymouth | 717 | 1 (#24) |
| Plymouth, Moor View | Plymouth | 654 | 8 (#2) |
| North Wiltshire | Wiltshire | 613 | <1 (#84) |
| Witney | West Oxfordshire | 542 | <1 (#96) |
| Colchester | Colchester | 495 | 5 (#5) |
| South West Wiltshire | Wiltshire | 440 | <1 (#128) |
| St Ives | Cornwall | 439 | <1 (#85) |
| Wantage | South Oxfordshire | 437 | <1 (#98) |
| South West Norfolk | Breckland | 428 | <1 (#263) |
| Fareham | Fareham | 423 | 3 (#8) |
| Yeovil | South Somerset | 421 | <1 (#63) |
| Lincoln | North Kesteven | 408 | 4 (#9) |
| North West Hampshire | Test Valley | 395 | <1 (#119) |
| Rutland and Melton | Melton | 384 | <1 (#251) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person. Note: highlighted rows show the parliamentary constituencies that are in the top 20 for the greatest number of pupils receiving SPP and top 20 for greatest density of service pupils per km²

The top parliamentary constituencies with the greatest number of service families were, unsurprisingly, in local authorities with the greatest overall number of service families. Fareham is a local authority that consistently appeared in the top 20 tables for the greatest number of stationed personnel (rank 18 in Table D1) and Armed Forces Household Reference Persons (rank 4 in Table E1). Interestingly, the parliamentary constituency Gosport in Fareham, also had the greatest density of estimated service families (see Table F2).

Table F2. Top 20 local authorities in England with the greatest number of estimated military families 2017/18

| Local Authority | Number of Families | Density per Km ² (#Rank) ^a |
|-----------------------------|--------------------|--|
| Wiltshire | 3601 | <1 (#26) |
| Plymouth | 1702 | 2 (#5) |
| North Kesteven | 1485 | <1 (#63) |
| Fareham | 1392 | 6 (#1) |
| Cornwall | 1304 | <1 (#102) |
| Richmondshire | 1227 | <1 (#67) |
| Hart | 1118 | 1 (#9) |
| South Oxfordshire | 664 | <1 (#65) |
| Shropshire | 655 | <1 (#174) |
| Breckland | 646 | <1 (#123) |
| South Somerset | 615 | <1 (#79) |
| Colchester | 590 | <1 (#49) |
| Test Valley | 545 | <1 (#60) |
| West Oxfordshire | 543 | <1 (#43) |
| Herefordshire, County of | 497 | <1 (#152) |
| Portsmouth | 468 | 4 (#2) |
| Purbeck | 462 | <1 (#39) |
| Harrogate | 456 | <1 (#175) |
| Wycombe | 429 | <1 (#109) |
| Gloucester | 423 | <1 (#31) |

^aDensity is rounded to the nearest whole number, where figure was <0.5 density is reported as <1 person.
Note: highlighted rows show the local authorities that are in the top 20 for the greatest number of estimated military families and top 20 for greatest density of estimated military families per km²

Regardless of dataset considered, Wiltshire remains one of the top local authorities. Plymouth and Richmondshire also appear in the top for all datasets considered. These areas are unsurprising when you consider the military installations bases there. However, there are three local authorities that first appear in the top 20 using the SPP family estimate: South Oxfordshire, Purbeck, and Gloucester. These local authorities border other areas that have been identified previously as having large numbers of service families.



Exploring the psychological and social impact of intermittent separation on geographically dispersed military families.

Participant Information

You have been invited to be part of a study exploring the experiences of military families who have lived or are living away from serving personnel. Before deciding if you would like to be involved, it is important that you understand why this study is taking place and what it would mean for you. Please take time to read this information, discuss it with others and if you have any questions you are encouraged to speak to a member of the research team (contact details at the end of this document).

What is the purpose of this study?

The purpose of this study is to explore the experiences of military families who have lived or are living geographically dispersed. There will be a focus on the potential impact intermittent separation has had on the family unit.

What do you mean by geographically dispersed?

The term geographically dispersed means families who are living separately. For example, the serving personnel may be living in SLA whilst their family are living in private housing (usually located in a different area). As a result, the family and serving personnel may not see each other regularly. You may have heard of terms such as 'living unaccompanied' or 'weekending' to describe similar situations.

Why have I been invited to participate?

You have been invited to participate as you have indicated that:

- you are at least 16 years of age
- you are a spouse/partner or child in a military family who is living or has lived separately to the serving personnel at any point in the last 2 years
- living separately is/was as a result of the non-operational deployment of the serving personnel (Regular or Reserve service). This does not include living apart because of relationship separation.
- you have experienced intermittent contact as a result of living separately

Do I have to take part?

No, it is up to you whether you take part in the study. This information sheet will help inform that decision, and you are encouraged to discuss participation with others. If you choose to participate, you can choose to withdraw from the study at any point, without disclosing why.

What will this mean for me if I choose to participate?

If you choose to participate, you will be asked to take part in an interview. Interviews will be carried out face-to-face where appropriate and should last around 45 minutes. All interviews will be recorded using a Dictaphone. The interviews will centre on your personal experience of living apart from the serving member of your family, with a focus on the potential impact of intermittent separation on the family unit. You will also be asked to provide some basic information (e.g. age, relationship to serving personnel, service length.).

Will information collected in this study be kept confidential and anonymous?

All information collected in this study, including details about individual participants, will be entirely anonymous and unidentifiable. You will be allocated a participant code that will always be used to identify any data that you provide. All information will be treated with confidence and stored securely. Only the research team will have access to this documentation. Should the research be presented or published in any form, then that information will be generalized (i.e. your personal information or data will not be identifiable).

How can I withdraw from the project?

The research you will take part in will be most valuable if few people withdraw from it, so please discuss any concerns you might have with the investigators. During the study itself, if you decide that you do not wish to take any further part then please inform one of the research team as soon as possible (see contact details, below), and they will facilitate your withdrawal and discuss with you how you would like your data to be treated in the future. After you have completed the research you can still withdraw your data by contacting the research team (contact details are below), give them your participant number or if you have lost this give them your name. Withdrawal from the study will be treated without judgment.

If, for any reason, you wish to withdraw your data please contact the investigator within a month of your participation. After this date, it may not be possible to withdraw your individual data as the results may already have been published. As all data are anonymised, your individual data will not be identifiable in any way

Who has reviewed this study?

This study has been approved by Northumbria University's Faculty of Health and Life Sciences ethics committee.

Signposting Information

If you require any support, please contact the most appropriate service below:

| | |
|---------------------------|---|
| Hive Information Centres | Army: www.army.mod.uk/personnel-and-welfare/hives/ Royal Navy: www.royalnavy.mod.uk/welfare/welfare-teams RAF: www.raf.mod.uk/serving-families/hive-finder/ |
| Army Families Federation | Tel: 01264 382326 Website: www.aff.org.uk/ |
| Naval Families Federation | Tel: 02392 654374 Website: www.nff.org.uk/ |
| RAF Families Federation | Tel: 01780 781650 Website: www.raf-ff.org.uk/ |
| SSAFA | Tel: 0800 731 4880 Website: www.ssafa.org.uk |
| NHS Choices | www.nhs.uk/Service-Search |

Contact details for further information:

Alison Osborne alison.osborne2@northumbria.ac.uk 0191 215 6008

If you would like independent information about this project, please contact:

Dr Peter McMeekin peter.mcmeekin@northumbria.ac.uk 0191 215 6368



**Exploring the psychological and social impact of intermittent separation
on geographically dispersed military families.**

Consent Form

You have been invited to be part of a study exploring the experiences of military families who have lived or are living separated from serving personnel. Please ensure you have read the information sheet provided. If you wish to take part, please complete the consent form below.

Researcher: Alison Osborne

Please tick or initial where appropriate

| | |
|--|--------------------------|
| I have carefully read and understood the Participant Information Sheet. | <input type="checkbox"/> |
| I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers. | <input type="checkbox"/> |
| I understand I am free to withdraw from the study, without having to give a reason for withdrawing, and without prejudice. | <input type="checkbox"/> |
| I agree to participate in an interview. I understand that this will be recorded using a Dictaphone. I give permission to the researcher to have access to this information for analysis. | <input type="checkbox"/> |
| I understand that any information provided will be strictly confidential and that no names/identifying information will be used. | <input type="checkbox"/> |
| I understand that the information I have given in this study may be used in the future and as part of further work on this subject. | <input type="checkbox"/> |
| I agree to take part in this study. | <input type="checkbox"/> |

| | |
|--|--------------------|
| Name of Participant: _____ | Date: _____ |
| Signature of Participant: _____ | |
| Name of Researcher: _____ | Date: _____ |
| Signature of Researcher: _____ | |



Exploring the psychological and social impact of intermittent separation on geographically dispersed military families.

Demographic Information Questionnaire

You have consented to take part in this research looking into the psychological and social impact of intermittent separation on geographically dispersed military families. Please complete the questionnaire below on some basic information. Please ask the research if you have any questions or concerns. You may omit any question you feel uncomfortable answering.

Participant Information

Please indicate your gender:

- Female Male

How old are you?

What is your relationship to the serving member of your family?

- Spouse/partner Child

Family Information

Please indicate the size of your family:

How many children under the age of 18?

Are you or have you ever lived in Service Family Accommodation (SFA)?

- Yes No

If so, how long for?

Are you currently living 'geographically dispersed' from the serving member of your family?

- Yes No

How long have/did you live separately for?

When you were living separately, was this by choice?

- Yes No

Please explain:

Serving Personnel Information

What service branch is the serving member of your family currently serving in?

- Royal Navy/Royal Marines British Army Royal Air Force

What is their engagement type?

- Regular Reserve
 FTRS – Full Commitment FTRS – Home/Limited Commitment

What is their rank?

How long has the serving member of your family served?

How long have you been a military family?

Interview Schedule

Background on Dispersal

Start asking for a bit of background on living dispersed.

How long have you been living dispersed?

Why are have you lived dispersed?

Is this the first time you have lived dispersed?

Explore...

How did you feel about being dispersed x years ago?

Were there different things you had to get used to back then?

Impact of Separation (try to focus on psychological impact)

How are you coping/managing with living dispersed?

Prompt for relationships

What does the typical separation period look like?

How does living dispersed affect you and your family?

Tell me the best thing about living dispersed...

Tell me the worst thing about living dispersed...

The Role of Support Networks

Support networks

Military vs. civilian

Wider family support

Do you know anyone else who has experience of living dispersed? Does this help?

Any experience of outside 'opinions' on being a military family (dispersed) in civilian society?

Identity

Do you feel part of a military community?

Do you identify as being a military family? – explain...

Wider Impact of Dispersal on Career and Education

Discuss career/employment/volunteering

Impact of dispersal on children and their education

Wider Support and Policy

Have you reached out to any organisations such as the Family Federation, charities, or in-service support through HIVES/Welfare centres?

Is there anything you wish was/is available to you in your situation?

Any suggested improvements?

MOD or wider support?

Thoughts on the Future Accommodation model

Follow-up questions to evoke more information

Ask open questions around answers from demographics questionnaire.

Evidence suggests... what do you think about that?

Topics: stress, anxiety, low mood, isolation

Is there anything you would like to say about living dispersed that we may not have already covered?

Coding for Phase 2 Framework Analysis

01.00 Nature of Dispersal

- 01.01 Current Dispersal
 - 01.01.01 *Positive Outlook on Dispersal*
 - 01.01.02 *'It Is What It Is' Mentality*
- 01.02 No Previous Dispersal Experience
- 01.03 Weekending
- 01.04 Adjustments to the Nature of Dispersal
 - 01.04.01 *Extra Time at Home*
- 01.05 Previous Dispersal
- 01.06 Reasons for Dispersal
 - 01.06.01 *Leaving the Military*
 - 01.06.02 *Children's Education*
 - 01.06.03 *Employment*
 - 01.06.04 *Owning Own Home*
 - 01.06.05 *No 'Choice'*
 - 01.06.06 *General Stability*
 - 01.06.07 *Closer to Family*
- 01.07 Future Dispersal
 - 01.07.01 *Uncertain Future*

02.00 Living Arrangements

- 02.01 Housing Support
- 02.02 SFA
- 02.03 Changes in Living Arrangements

03.00 General Experience of Dispersal

- 03.01 Adjustments to Dispersal and Reunion
- 03.02 Routine

04.00 Impact of Dispersal on Relationship

- 04.01 Arguments, Conflict
- 04.02 Communication
- 04.03 Parent and Child Relationships

- 04.04 Difficulties

05.00 Impact of Dispersal on Relationship

06.00 Stress

07.00 Emotions

- 07.01 'Up and Down'
- 07.02 Tired or Exhausted by Dispersal
- 07.03 Coping

08.00 Support Networks

- 08.01 Friendships
 - 08.01.01 *Civilian Friendships*
 - 08.01.02 *Military-Connected Friendships*
- 08.02 Lack of Support
 - 08.02.01 *Lack of Access to 'unit' Support and Welfare*
- 08.03 Isolation
- 08.04 Family
- 08.05 Lack of Understanding
- 08.06 Support Available if Needed
- 08.07 Social Media
- 08.08 Local Authority

09.00 Benefits of Dispersal

- 09.01 Benefits for the Serving Person
- 09.02 Best Thing About Being Dispersed
- 09.03 Connecting with Family
- 09.04 Stability

10.00 Responsibilities

- 10.01 Renegotiation of Roles in the House
- 10.02 Difficulty Navigating Military Processes

11.00 Comparisons to Deployment

12.00 Negatives of Dispersal

- 12.01 Disruptive
- 12.02 Negative Impact on Children
- 12.03 Worst Thing About Being Dispersed

13.00 Children's Education

- 13.01 Boarding School
 - 03.01.01 Making Decision to Attend Boarding School*
- 13.02 Multiple Schools
- 13.03 SPP
- 13.04 Supportive School

14.00 Military Community

- 14.01 Living on Base

15.00 Living in a Civilian Community**16.00 MOD Systems and Policies**

- 16.01 MOD's Perceived View of the Family
- 16.02 FAM
- 16.03 Communication
- 16.04 Flexible Service Policy
- 16.05 Force Help to Buy Scheme

17.00 Careers, Employment and Volunteering

- 17.01 Impact of Dispersal on Career

- 17.02 Impact of Mobility on Career or Job Seeking

- 17.03 Finances

- 17.04 Volunteering

19.00 Accessing Support**20.00 No Continuity in Support Available****21.00 Suggestions for Future Improvements in Support****22.00 Dispersal vs. Mobility****23.00 Military Family Identity**

- 23.01 Do Not Feel Valued

24.00 Single Parenting**25.00 Loneliness****26.00 Finances****27.00 Impact of Dispersal on Children**

- 27.01 Negative Impact on Children
- 27.02 Positive Impact on Children
- 27.03 Age

28.00 Plans to Leave the Military**29.00 Choice to Have Children**

Coding for Identity Theme

| Identity | |
|-----------------|--|
| 01.01.01 | Positive outlook on dispersal |
| 01.01.02 | 'It is what it is' mentality |
| 01.03 | Weekending |
| 01.06 | Reasons for dispersal |
| 02.00 | Living arrangements |
| 02.02 | SFA |
| 02.03 | Changes in living arrangements |
| 03.00 | General experience of living dispersed |
| 03.01 | Adjustments to dispersal and reunion |
| 03.02 | Routine |
| 04.00 | Impact of dispersal on relationships |
| 07.01 | 'Up and down' |
| 08.01 | Friendships |
| 08.01.01 | Civilian friendships |
| 08.01.02 | Military-connected friendships |
| 08.02.01 | Lack of access to 'unit' support and welfare |
| 08.03 | Isolation |
| 09.00 | Benefits of dispersal |
| 09.02 | Best thing about being dispersed |
| 10.00 | Responsibilities |
| 10.01 | Renegotiation of roles in the house |
| 11.00 | Comparisons to deployment |
| 12.00 | Negatives of dispersal |
| 12.03 | Worst thing about being dispersed |
| 13.04 | Supportive school |
| 14.00 | Military community |
| 14.01 | Living on base |
| 15.00 | Living in a civilian community |
| 16.00 | MOD systems and policies |
| 16.01 | MOD's perceived view of the family |
| 16.03 | Communication |
| 17.00 | Careers, employment, and volunteering |
| 17.01 | Impact of dispersal on career |
| 17.02 | Impact of mobility on career or job seeking |
| 17.03 | Finances |
| 18.00 | Civilian understanding of dispersal |
| 22.00 | Dispersal vs. mobility |
| 23.00 | Military family identity |
| 23.01 | Do not feel valued |
| 26.00 | Finances |

Coding for Loneliness Theme

| Loneliness | |
|-------------------|--|
| 01.01.02 | 'It is what it is' mentality |
| 01.03 | Weekending |
| 02.00 | Living arrangements |
| 02.03 | Changes in living arrangements |
| 03.00 | General experience of living dispersed |
| 03.01 | Adjustments to dispersal and reunion |
| 04.00 | Impact of dispersal on relationships |
| 04.02 | Communication |
| 04.03 | Parent and Child Relationships |
| 05.00 | Impact of dispersal on serving personnel |
| 06.00 | Stress |
| 07.00 | Emotions |
| 07.02 | Tired or exhausted by dispersal |
| 08.01 | Friendships |
| 08.01.01 | Civilian friendships |
| 08.01.02 | Military-connected friendships |
| 08.02 | Lack of support |
| 08.02.01 | Lack of access to 'unit' support and welfare |
| 08.03 | Isolation |
| 08.05 | Lack of understanding |
| 10.00 | Responsibilities |
| 10.01 | Renegotiation of roles in the house |
| 11.00 | Comparisons to deployment |
| 12.00 | Negatives of dispersal |
| 12.03 | Worst thing about being dispersed |
| 17.00 | Careers, employment, and volunteering |
| 17.01 | Impact of dispersal on career |
| 18.00 | Civilian understanding of dispersal |
| 22.00 | Dispersal vs. mobility |
| 23.00 | Military family identity |
| 23.01 | Do not feel valued |
| 24.00 | Single parenting |
| 25.00 | Loneliness |
| 27.00 | Impact of dispersal on children |
| 27.01 | Negative impact on children |
| 27.01 | Positive impact on children |
| 27.03 | Age |

Coding for Well-Being Theme

| Well-Being | |
|-------------------|--|
| 01.01.01 | Positive outlook on dispersal |
| 01.01.02 | 'It is what it is' mentality |
| 01.03 | Weekending |
| 01.04 | Adjustments to the nature of dispersal |
| 01.05 | Previous dispersal |
| 01.06 | Reasons for dispersal |
| 01.07.01 | Uncertain future |
| 02.03 | Changes in living arrangements |
| 03.00 | General experience of living dispersed |
| 03.01 | Adjustments to dispersal and reunion |
| 04.00 | Impact of dispersal on relationships |
| 04.01 | Arguments, conflict |
| 04.02 | Communication |
| 04.03 | Parent and child relationships |
| 04.04 | Difficulties |
| 05.00 | Impact of dispersal on serving personnel |
| 06.00 | Stress |
| 07.00 | Emotions |
| 07.01 | 'Up and down' |
| 07.02 | Tired or exhausted by dispersal |
| 07.03 | Coping |
| 08.00 | Support Networks |
| 08.01 | Friendships |
| 08.01.01 | Civilian friendships |
| 08.01.02 | Military-connected friendships |
| 08.02 | Lack of support |
| 08.02.01 | Lack of access to 'unit' support and welfare |
| 08.03 | Isolation |
| 08.04 | Family |
| 08.05 | Lack of understanding |
| 08.07 | Social media |
| 09.00 | Benefits of dispersal |
| 09.02 | Best thing about being dispersed |
| 10.00 | Responsibilities |
| 10.01 | Renegotiation of roles in the house |
| 11.00 | Comparisons to deployment |
| 12.00 | Negatives of dispersal |
| 12.01 | Disruptive |
| 12.02 | Negative impact on children |
| 12.03 | Worst thing about being dispersed |
| 17.00 | Careers, employment, and volunteering |
| 17.01 | Impact of dispersal on career |
| 18.00 | Civilian understanding of dispersal |
| 22.00 | Dispersal vs. mobility |
| 23.00 | Military family identity |
| 23.01 | Do not feel valued |
| 27.00 | Impact of dispersal on children |
| 27.01 | Negative impact on children |
| 27.01 | Positive impact on children |
| 27.03 | Age |

Coding for Familial Relationships Theme

| Familial Relationships | |
|-------------------------------|--|
| 01.01.01 | Positive outlook on dispersal |
| 01.03 | Weekending |
| 01.06 | Reasons for dispersal |
| 01.06.07 | Closer to family |
| 02.00 | Living arrangements |
| 02.03 | Changes in living arrangements |
| 03.00 | General experience of living dispersed |
| 03.01 | Adjustments to dispersal and reunion |
| 03.02 | Routine |
| 04.00 | Impact of dispersal on relationships |
| 04.01 | Arguments, conflict |
| 04.02 | Communication |
| 04.03 | Parent and child relationships |
| 04.04 | Difficulties |
| 05.00 | Impact of dispersal on serving personnel |
| 06.00 | Stress |
| 07.00 | Emotions |
| 07.01 | 'Up and down' |
| 07.02 | Tired or exhausted by dispersal |
| 07.03 | Coping |
| 09.00 | Benefits of dispersal |
| 09.02 | Best thing about being dispersed |
| 10.00 | Responsibilities |
| 10.01 | Renegotiation of roles in the house |
| 11.00 | Comparisons to deployment |
| 12.00 | Negatives of dispersal |
| 12.01 | Disruptive |
| 12.02 | Negative impact on children |
| 12.03 | Worst thing about being dispersed |
| 16.04 | Flexible service policy |
| 22.00 | Dispersal vs. mobility |
| 17.03 | Finances |
| 27.00 | Impact of dispersal on children |
| 27.01 | Negative impact on children |
| 27.01 | Positive impact on children |
| 27.03 | Age |

Coding for Accessing Support Theme

| Accessing Support | |
|--------------------------|--|
| 01.01.02 | 'It is what it is' mentality |
| 01.05 | Previous dispersal |
| 01.06 | Reasons for dispersal |
| 01.06.07 | Closer to family |
| 02.01 | Housing support |
| 02.02 | SFA |
| 02.03 | Changes in living arrangements |
| 03.00 | General experience of living dispersed |
| 04.02 | Communication |
| 06.00 | Stress |
| 07.00 | Emotions |
| 07.02 | Tired or exhausted by dispersal |
| 07.03 | Coping |
| 08.00 | Support networks |
| 08.01 | Friendships |
| 08.01.01 | Civilian friendships |
| 08.01.02 | Military-connected friendships |
| 08.02 | Lack of support |
| 08.02.01 | Lack of access to 'unit' support and welfare |
| 08.03 | Isolation |
| 08.04 | Family |
| 08.05 | Lack of understanding |
| 08.06 | Social support if needed |
| 08.07 | Social media |
| 08.08 | Local authority |
| 09.02 | Best thing about being dispersed |
| 09.03 | Connecting with family |
| 09.04 | Stability |
| 10.02 | Difficulty navigating military processes |
| 12.00 | Negatives of dispersal |
| 16.00 | MOD systems and policies |
| 16.01 | MOD's perceived view of the family |
| 16.02 | FAM |
| 16.03 | Communication |
| 18.00 | Civilian understanding of dispersal |
| 19.00 | Accessing Support |
| 20.00 | No continuity in support available |
| 21.00 | Suggestions for future improvements in support |
| 22.00 | Dispersal vs. mobility |
| 23.00 | Military family identity |
| 23.01 | Do not feel valued |

