

THE UNIVERSITY of EDINBURGH

A systematic review into the barriers to engagement with veteran mental health services as reported by veterans

And

An explorative study into the impact of the coronavirus pandemic on veterans' wellbeing

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Doctorate in Clinical Psychology

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May 2022

Acknowledgments

To begin with I would like to thank Dr Lucy Abraham for her support throughout this process. I am eternally grateful for the advice she provided me with during a time when she had many competing demands due to the outbreak of the coronavirus pandemic.

Secondly, Charlotte Smith and Carol Ball from The University of Edinburgh deserve a special mention for going above and beyond in order to allow this project to receive ethical approval. The project faced many obstacles during this process due to the outbreak of the pandemic. During times whereby I feared the project had stalled both Charlotte and Carol remained a constant source of support. Furthermore, I would like to thank Rowena Stewart for her guidance and expertise in conducting reviews of literature.

Most importantly, to the veterans that so passionately wanted to be a part of this project. Your bravery to be so open and honest during such challenging times will be something that stays with me throughout my career.

Finally, to my friends and family, thanks for keeping me on the train tracks throughout the three years.

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Thesis portfolio abstract

Background: Veterans who engage with mental health services consistently report better wellbeing outcomes. Despite this not all veterans engage in mental health services due to specific veteran centric barriers. However, much of this research is often quantitative in nature, thus ignoring the experiences from the veteran community. Similarly, the experiences of the veteran community are also limited regarding the consequences of the coronavirus pandemic on this population. Currently, there is lack of research into this topic despite expected population wide consequences on health and wellbeing.

Aims: This current thesis portfolio aimed to systematically review and synthesise qualitative data into the barriers to engagement with veteran mental health services as reported by military veterans. Following this, an empirical project then explored the impact of the coronavirus pandemic on military veteran wellbeing.

Methods: Firstly, a systematic search across several electronic databases was completed to include relevant studies. After this a meta-ethnography was conducted on these included studies. The empirical project included ten veterans who were interviewed to explore their own experiences of living through the pandemic. Following this Interpretative Phenomenological Analysis (IPA) was used to analyse these documented experiences.

Results: The review highlighted five key veteran centric barriers to engagement: (1) the availability of trained professionals, (2) long waiting times to be seen, (3) a lack of service information, (4) recognising the problem and (5) stigma. From the analysis of

the empirical project three key superordinate themes were stated: (1) the benefits of a military mindset, (2) the negative impact on veteran wellbeing, (3) relationships.

Discussion: The above results from both the systematic review and empirical project are summarised within the below chapters. In addition, methodological strengths and limitations are discussed along with specific clinical implications and suggestions for further research.

Thesis portfolio lay summary

Background: Individuals who have served within the UK armed forces are commonly referred to as veterans. A percentage of these veterans suffer from mental health difficulties which they require treatment for, provided by specialist mental health services. Although evidence has found that veterans who engage in these services see an improvement in their mental health, some veterans still don't engage with services. Certain barriers to engagement with services exist; however, to date no current study has comprehensively analysed these barriers from a veteran point of view. Similarly, there is very little known about the impact of the pandemic on veteran wellbeing despite predications suggesting that there will be population wide consequences on wellbeing.

Aims: Firstly, to review and analyse the literature base into the barriers that exist for veterans who want to engage in mental health services as reported by them. Secondly, the empirical project of this portfolio explored the impact of the coronavirus pandemic on the wellbeing of veterans.

Methods: A search was initially conducted across a variety of electronic databases to highlight a number of studies that were deemed appropriate to analyse. Secondly, for the empirical project ten veterans were interviewed to capture their own experiences of living through the pandemic. Following this, the data was then analysed to highlight certain themes.

Findings: The review highlighted five key barriers to engagement for veterans: (1) the availability of trained professionals, (2) long waiting times to be seen, (3) a lack of service information, (4) recognising the problem and (5) stigma. From the analysis of

the empirical project three key themes were found: (1) the benefits of a military mindset, (2) the negative impact on veteran wellbeing, (3) relationships.

Conclusions: The findings mentioned above are discussed in the below chapters. Furthermore, the projects limitations and strengths are explored in depth. Finally, the author states how these findings may be of benefit to veteran mental health services along with some ideas for further research.

Chapter 1: Systematic review

Title: A systematic review into the barriers to engagement with veteran mental health services as reported by veterans

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Conflict of Interest: None

Funding: This research did not receive any grants from public, commercial or not for profit sector funding agencies.

Word count: 10,204 (excluding references, appendices)

Keywords: barriers, engagement, mental health services, veterans'

Short running title: barriers to engagement with services (max of 40 characters)

*This systematic review has been prepared in accordance with the author guidelines of Journal of Clinical Psychology & Psychotherapy (see appendix 1)

Abstract

Background: Engagement with veteran mental health services is associated with better outcomes for veterans who suffer from mental health disorders. However, not all individuals with mental health disorders engage with mental health services. This is specifically true for the veteran population whereby a number of veteran centric barriers to engagement exist. However, the majority of this research exploring veteran centric barriers is quantitative in nature, often ignoring the experiences of the veteran. In light of this, this current review synthesised the findings from qualitative studies that explored veterans' perspectives into the barriers to engagement with veteran mental health services.

Methods: A systematic electronic database search of eight databases was conducted. Utilising the PRISMA guidelines eight studies met inclusion criteria. Study quality was assessed using the CASP tool for qualitative research. The included qualitative studies were synthesised using a meta-ethnography.

Results: Findings from the meta-ethnography highlighted five key barriers to engagement. These barriers were: (1) the availability of trained professionals, (2) long waiting times to be seen, (3) a lack of service information, (4) recognising the problem, (5) stigma. In agreement with the process of meta-ethnography lines of argument were also suggested, a lack of trust in services and the role of personal beliefs and attitudes.

Discussion: The above results are fully discussed referring to the reviews limitations as well as strengths. Ideas for future research are explored in addition to highlighting clinical and service implications.

1. Introduction

Military veterans

Within the United Kingdom a military veteran is defined as any individual who has served for at least a day or more in HM Armed Forces, whether as a regular or reservist (Scottish Government, 2012). Many military and non-military factors contribute to the presence of mental health disorders within the veteran population (House of Commons Defence Committee, 2019; Oster et al., 2017). Therefore, it is difficult to determine the extent to which military service triggered an individual's mental health condition given the range of factors that might have contributed (House of Commons Defence Committee, 2019). From the 1578 medical discharges that the Military of Defense (MoD) reported in 2020, it was estimated that 34% of these were due to mental health difficulties (Rhead et al., 2020).

Previous studies of prevalence found that from a sample of 4,461,208 veterans 13.5% met diagnostic criteria for depression, 9.3% for PTSD, 8.3% for substance use disorders and 4.8% for anxiety disorders (Trivedi et al., 2014). Veterans who met diagnostic criteria for depression and anxiety reported better outcomes following a period of engagement with veteran mental health services (Trivedi et al., 2014). Therefore, highlighting a positive relationship between engagement and prognosis.

1.2 Engagement with services

Engagement with veteran mental health services is associated with better mental health outcomes (Trivedi et al, 2014). It is often assumed that individuals who present with serious mental health disorders remained actively engaged with these services (Kreyenbuhl et al., 2009). However, large historical community surveys, such as the Epidemiologic Catchment Area Survey (ECA) and the National Comorbidity Survey (NCS) contradict this assumption. Both surveys found that between 35% and 53% of individuals who were diagnosed with a serious mental health disorder were not actively engaged with mental health services (Kessler et al., 2001; Goodwin et al., 1993). This is concerning given the devastating consequences disengagement with mental health services can have on individuals with serious mental health conditions (Kreyenbuhl et al., 2009).

Regarding the veteran population, disengagement from services has been found to be prevalent across this demographic (Fischer et al., 2008), with 25% of veterans from a sample of 164,150 having no contact with either their medical or mental health provider during a 12-month period. (Fischer et al., 2008). Gaps of 12 months were not only seen as an undesirable pattern of care, but were consistent with a pattern of irregular service engagement and long term disengagement from care (Fischer et al., 2008). Patterns of irregular service engagement are a key barrier to the implementation of mental health interventions within the veteran population (Goetter et al., 2015). As expected, untreated mental health difficulties within the veteran population can have damaging consequences across a number of domains, including

mental and physical health (Kessler, 2000; Schnurr & Green, 2004), quality of life (Pittman et al., 2011) and relationships (Shalev, 1997).

1.3 Barriers to engagement

A number of unique barriers to engagement with mental health services are often experienced by veterans when accessing care (McCarthy, et al., 2007). Due to these barriers, evidence suggests UK veterans repeatedly under use mental health services (Greenberg, 2014), with only 50% of this population actually seeking help for their mental health difficulties (Iverson et al., 2005). To date, research has been able to identify a range of veteran specific barriers to engagement, such as: a fear of negative consequences associated with seeking help (Gorman et al., 2011; Johnson et al., 2010), negative beliefs and attitudes regarding mental health care (Pietrzak et al., 2009), stigma (Iverson et al., 2011) and specific challenges regarding the availability and accessibility of veteran services (Brown et al., 2011).

Although the above research made attempts to include the experiences of veterans within their designs, the vast majority of these studies still employed quantitative methodologies. Consequently, ignoring the experiences of veterans and their own insights into the barriers to engagement with veteran mental health services (Cheney et al., 2018). Individuals who have different life experiences and backgrounds may use different languages and unique cultural frameworks when reflecting upon healthcare engagement and systems (Tai-Seale et al., 2016; Gerteis, 2002; Bardes, 2012). Therefore, a greater emphasis should be placed upon research that is patient-

centered and focuses on collaborating with the population of interest (Tai-Seale et al., 2016). If research can understand the veteran-centric barriers to mental health services as reported by veterans, this will provide a greater insight into the future plans designed to increase initiation and engagement with veteran mental health services (Cheney et al., 2018).

1.4 Qualitative synthesis

Academia is encouraging the facilitation of projects that consider the lived experience of individuals (Tai-Seale et al., 2016; Gerteis, 2002; Bardes, 2012). Specifically valuing research whereby, the perspectives of veterans are considered regarding the identification of veteran-centric barriers towards mental health services (Cheney et al., 2018). At a conceptual level, qualitative methodologies provide researchers with an ability to acquire a deeper understanding of the phenomena of interest as result of the exploration of subjective lived experiences (Barker et al., 2015). Specifically, qualitative synthesis allows the researcher to systemically analyse a range of qualitative studies, which can provide robust evidence to inform health care policy and practice (Hannes & Lockwood, 2011). In doing so, providing powerful explanations in a format that single studies fail to do, as well as having the ability to refute or revise the current understanding of a particular phenomenon (Hannes & Lockwood, 2011).

Furthermore, due to this ability to include a number of explanations, research findings are associated with higher levels of generalisability (Sherwood, 1999). This increase in generalisability is a result of a rigorous process of study identification, integration, and contextual interpretation of the included results (Dixon-Woods & Fitzpatrick,

2001). The synthesis process itself allows for a critical interpretation of the data (Paterson et al., 2001), which can result in the creation ideas that are relevant to future audiences.

1.5 Rationale and aims

Engagement with veteran mental health services is associated with better outcomes for veterans who suffer from mental health disorders (Trivedi et al, 2014). However, not all individuals with mental health disorders engage with mental health services (Kessler et al., 2001). This is specifically true for the veteran population (Greenberg, 2014, Iverson et al., 2005) whereby a number of veteran centric barriers to engagement exist (Gorman et al., 2011; Pietrzak et al., 2009; Iverson et al., 2011; Brown et al., 2011). However, the majority of this research into the identification of veteran centric barriers are quantitative in nature, ignoring both the insights and experiences unique to the veteran population (Cheney et al., 2018).

In light of this, academia recommends the implementation of research that is patient centered and collaborates with the population of interest (Tai-Seale et al., 2016). Providing interested audiences with a greater understanding into the veteran centred barriers to engagement as reported by veterans (Cheney et al., 2018). Therefore, the current project aims to synthesise qualitative studies that explored veteran perspectives into the barriers to engagement with veteran mental health services. Given the absence of a review of this kind, this review is unique in nature, providing a

comprehensive synthesis of the available data which addresses this current gap in veteran literature.

2.Method

This current review created an inclusion criteria in order to facilitate a comprehensive appraisal and synthesis of published studies. The process and structure was informed by the work of Boland et al. (2017) who published a guidance document to facilitate the completion of qualitative systematic reviews. Prior to the initiation of the review a scoping search was performed across Google scholar, Medline, PsycINFO, EMBASE, and Cochrane electronic databases to ensure no previous systematic review into this topic area had been published. Similarly, a search was also completed on the PROSPERO electronic platform to ensure no other academic researcher was currently in the process of conducting an identical review as to the one conducted below. At the time of writing this review, and to the authors knowledge no previous systematic review was either published or in the process of being completed that synthesised data from the same area of interest as this current systematic review.

2.1 Search strategy

The search was completed across eight electronic databases: Medline, PsychINFO, EMBASE, CINHAL Plus, Scopus, Web of Science Core Collection, Applied Social Sciences Index & Abstracts and PTSD pubs The decision to select these specific databases was made following a consultation with the librarian from the University of Edinburgh who has specific expertise in conducting systematic reviews. Given the current review synthesised qualitative data the PICO (population, phenomena of interest and context) tool (Joanna Briggs Institute, 2014) routinely used to assist in the creation of search terms could not be used. Instead, the SPIDER (sample,

phenomenon of interest, design, evaluation and research type) tool was utilised given it is specifically designed for the synthesis of qualitative evidence (Cooke et al., 2012). After consultation with universities librarian mentioned above, the following search terms were utilised:

- 1. Terms relating to the sample: "military veteran*" OR "ex armed force*"
- 2. Terms relating to phenomenon of interest: "mental health service*" OR "mental health facility*" OR "psychological service*"
- 3. Terms relating to evaluation: "barrier*" OR "difficulty*" OR "obstacle*" AND "engagement" OR "commitment"

Each database was searched since inception until June 2022. Prior to screening any retrieved studies the search returned 273 studies.

2.2 Eligibility criteria

Studies were only included in the final synthesis if they met the inclusion and exclusion criteria listed in table 1. As noted below grey literature was excluded on the grounds it is often opinion driven and biased (Benzies et al., 2006), in the absence of peer review. In line with the suggestions of Boland et al. (2017) the inclusion and exclusion criteria tool in table 1 was initially piloted. This process involved collaboratively working with another trainee clinical psychologist to screen 10% of the studies included in the main search. This was done independently of each other, followed by a review process whereby any discrepancies were discussed. No discrepancies were found during this review process.

Table 1. Inclusion and exclusion criteria

	Inclusion criteria	Exclusion criteria			
Patient population	1.Military veterans.	1.Active members of the			
		military.			
Study design	1.Qualitative research.	1.Quantitative research.			
	2.Primary research.	2.Grey literature.			
	3.Mixed-methods				
		specific.			
Study focus	1.What are the barriers to	1.Family members and or			
	engagement with veteran	•			
	mental health services as				
	reported by military	exist for military veterans			
	veterans.	when engaging with mental			
		health services.			
Language	Studies published in English.	Studies not published in			
		English.			

2.3 Study selection

The selection process to determine which studies were included in the final synthesis followed the Preferred Reporting Items for Systematic Reviews and Meta Analyses protocol (PRISMA) (Moher et al., 2009). See figure 1 for PRISMA protocol.

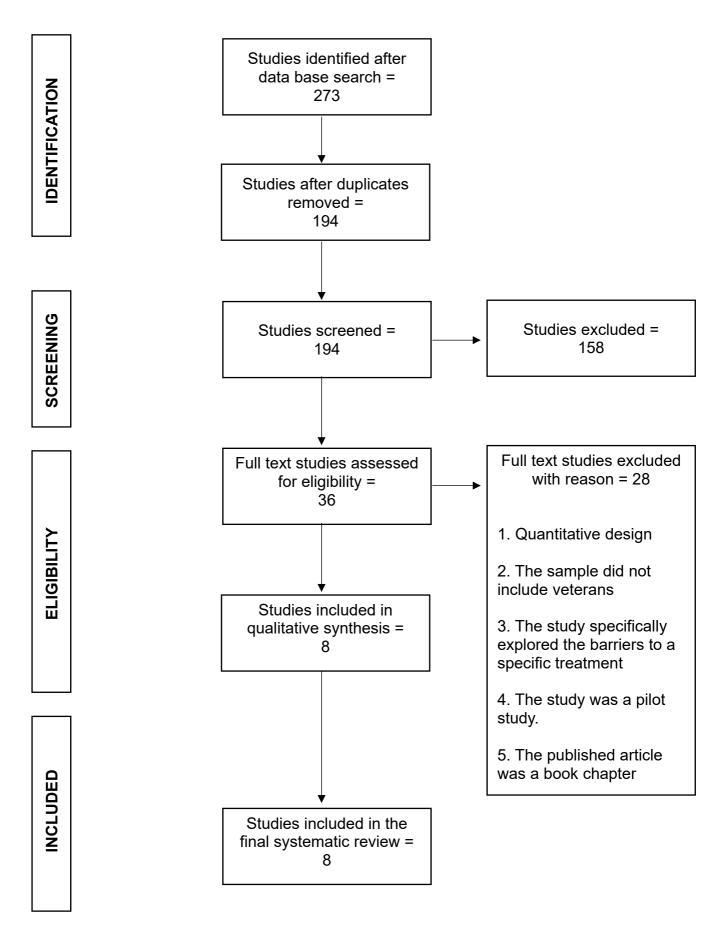


Figure 1. Prisma protocol

As shown above the data base search retrieved 273 studies. After duplicates were removed (N = 79 the remaining 194 studies were imported into the EndNote referencing management software programme (EndNote, 2021). Upon screening the titles and abstracts of the initial 194 studies 158 were excluded. Following this, full text articles (N = 36) were reviewed utisling the inclusion and exclusion criteria listed in table 1 which resulted in 8 studies being included in the final synthesis.

Certain concerns exist regarding the quality of indexing of qualitative research on search databases, such as EMBASE and MEDLINE (Shaw et al.,2004). Effective retrieval is dependent on the clarity of the title and abstract; however, the process of indexing is purely dependent upon the indexer's interpretation of the article (Cooke et al., 2012). Therefore, articles could be omitted due to the authors and the searchers disparity in how they define key concepts (Evans, 2002). This concern often leaves the researcher with a feeling of uncertainty given the probable omission of qualitative research due to the above limitations. In light of this, complementary search methods, such as following up references and citation searching are considered an important action to complete when systematically searching for qualitative studies given the deficiencies associated with effective retrieval (Grayson & Gomersall, 2003).

An external search was completed which did not include any of the databases named above. This process involved manually searching reference lists and citation searching, along with contacting researchers in this area. The response rate from fellow researchers was limited and did not yield the inclusion of any further studies. Similarly additional reference list and citation searching did not discover any further

studies of interest. Although these complementary searches did not retrieve further studies, it did minimise the impact of the retrieval limitations associated with qualitative studies.

2.4 Data extraction

Table 3 provides an overview of the eight studies identified from the search process which were subsequently analysed in the below synthesis. Each study conducted interviews to obtain participant data; however, they varied with regards to how the data was analysed (see table 3). Seven of the included studies were conducted in the United States of America and one in the United Kingdom.

2.5 Quality Assessment

Qualitative research is often noted to be "second class" in comparison to quantitative methods (Tong et al., 2007). However, it is often widely valued across health care settings (Pope et al., 2002). Reviews of this type have been suggested to provide richer conclusions and a greater depth of analysis in comparison to reviews of quantitative methods (Boland et al., 2017). However, to maintain solid methodological rigour it is imperative that qualitative reviews incorporate a process to determine the quality of the studies included in the review (Dixon-Woods & Fitzpatrick, 2001). The failure to adopt a form of quality assessment would risk including poor quality studies, which may distort the synthesis process resulting in difficulties during the interpretation phase (Campbell et al., 2003).

Rigour and relevance underpin any quality assessment. Rigour, relating to how reliable the study of interest is and relevance meaning whether or not the study provides meaningful answers to your research question (Boland et al., 2017). By completing a comprehensive quality assessment, the review employs a measure to minimize bias and error in the design, conduct and analysis (Khan et al., 2003).

When carrying out quality assessments of qualitative studies it is important to adopt a flexible approach given the included studies are regularly based on different qualitative research approaches (Boland et al., 2017). However, the assessment must still follow a structure given the critical remarks regarding qualitative research (Tong et al., 2007). Therefore, it is recommended to adhere to a multidimensional structured checklist when completing quality assessments within qualitative systematic reviews (Centre for Reviews and Dissemination, 2009). For this reason, this current review adopted the Critical Appraisal Skills Programme (CASP) qualitative tool (2018) which has been utilised in many previous qualitative reviews (Boland et al., 2017). The CASP tool itself contains 10 items and assesses the quality of qualitative studies across three broad areas: the local utility of the results, the results themselves and the validity of the study. See appendix 2 for a copy of the CASP tool.

Although the CASP tool has been used in predominantly reviews of qualitative data it does not include a scoring system. In order to overcome this limitation the scoring system proposed by Butler et al. (2016) was adopted. Butler et al. (2016) created a scoring system based on the group's experience of assessing the quality of studies derived from qualitative reviews. The scoring system provides each included study

with a rating of high quality (9-10 points), moderate quality (7.5 to 9 points) and low quality (less than 7.5 points). The reviewer systematically judges the study against the 10 items on the CASP tool and each item is scored accordingly. If the study is determined to agree with an item on the CASP tool the reviewer awards it 1 point. However, if they are unsure a score of 0.5 is awarded and if they are confident it does not meet the conditions of a specific item 0 points is awarded. At the end of the quality assessment if a study is awarded less than 6 points it should be excluded.

Due to the small number of studies included in the review a piloting phase of the CASP tool was not completed. However, upon completion of an initial review by the first author utilising the CASP tool, a secondary rating by an independent reviewer was undertaken. Given the low number of included studies, all eight of the included studies underwent a dual reviewer strategy to cross-check the quality assessment responses of the other reviewer (Boland et al., 2017). Therefore, improving the methodological rigour and objectivity of the review (Braga et al., 2011).

Interrater reliability from the CASP tool illustrated an agreement of 80%. Previous literature (Stemler, 2004) suggests an interrater reliability percentage of 70% or greater, which this current review exceeds. All remaining disagreements were discussed and resolved, as this is suggested to be a more effective strategy than to have a single summary statistic of agreement as proposed by Cohen's kappa (Pontius & Millones, 2011). Furthermore, previous systematic reviews of qualitative studies do not include Cohen's kappa during quality assessment (Cosco et al., 2013), highlighting additional authors reluctance to include this measure of inter-rater reliability.

2.6 Synthesis (Meta-ethnography)

Unlike quantitative methods of synthesis there is no standard approach when synthesizing qualitative research, thus providing the author with the opportunity to decide on how best to analyse the dataset (Boland et al., 2017). This current review chose to synthesis the below data utilising the process of meta-ethnography (Noblit & Hare, 1988). Meta-ethnography is the most frequently used qualitative synthesis approach (Hannes & Macaitis, 2012), providing many potential benefits to clinicians and policy makers (Cahill et al., 2018). Specifically, meta-ethnography is commonly used to analyse data from groups or subgroups of people (Boland, et al., 2017), therefore providing a strong rationale for it to be included as the methods synthesis within this current review. The process of meta-ethnography has four key iterative phases (see table 2).

Table 2 – the four iterative key phases of meta-ethnography (Noblit & Hare, 1988)

Phase of meta - ethnography	Processes involved
Phase 1: Reading the studies	Actively reading each paper in detail
Phase 2: Determining how the studies are related	To code each paper in turn to identify the presence of themes
Phase 3: Translating the studies into one another	Mapping similarities and differences across the studies resulting in the identification of shared themes (see table 5)
Phase 4: Synthesizing the translations	Identifying the themes that encompass each other and that can be further synthesized into lines of argument (meta-themes)

Phase 1 – reading the studies

The researcher began by reading each of the eight papers. The researcher completed several read throughs of each paper. During this time the researcher ensured they read each paper in detail to acquire a global understanding of each paper.

Phase 2 – determining how the studies are related

Following phase 1, and in line with previous suggestions (Lee et al., 2015) the researcher coded each of the eight papers to identify the key themes in each paper. This involved the researcher making initial notes against published transcript within each paper. These notes were then summarised to reflect the content of the note in a more concise way to represent a theme. A table was used facilitate this above process (see appendix 3). Each paper was read individually, taking breaks in between each paper to encourage the organic development of themes in the absence of being influenced by the previous paper.

Phase 3 – translating the studies into one another

Phase 3 involved translating each study into one another. This was completed via the inclusion of a table (see table 5) which is in line with previous suggestions (Britten, et al., 2002). The researcher inputted the themes, along with supportive transcript from each paper into the table to highlight any similarities or differences across the papers. This allowed the researcher to visually identify themes that were present across each

of the eight papers, providing the author with the opportunity to identify any themes that encapsulated each other. Themes were only included in the final version of the table if the theme was prevalent across the eight papers. For a theme to be viewed as prevalent, text in support of the theme had to be present across a minimum of 3 studies. Themes that did not have cross study support were excluded.

Phase 4 – synthesizing the translations

There is an acceptance within qualitative research that the exact mechanistic steps of this phase varies across authors (Atkins et al., 2007). However, the current author sought to overcome this limitation by adhering to the guidance of Britten et al., (2002). A key stipulation within this guidance encourages the author to discuss and reflect on each proposed line of argument with additional researchers (Britten et al., 2002). The purpose of this is to ensure the creation of and labelling of each line of argument accurately encapsulates the previously identified themes. In light of this, phase 4 of the synthesis was completed with the same researcher who acted as the second-rater for the CASP tool given they are familiar with this process and current review. Both researchers met to review table 5, each having their own copy. Each proposed line of argument was then presented to the second reviewer by the main author to ensure both lines of argument were accurate representations of the themes it encapsulated.

3.Results

3.1 Included studies

A total of eight studies met the reviews inclusion criteria. Table 3 provides a summary of the included studies. The sample size across the eight studies was 859, Regarding age, all included participants ranged from the ages of 17-70. Only one study (Mellotte, et al., 2017) included data listing the participants' branch of service and years served. All of the eight studies were published between 2002 and 2019.

Only one of the eight studies was rated as a high quality paper (Mellotte et al., 2017), all remaining studies were rated as moderate. A common theme across all eight studies was the lack of reflection towards the researcher's relationship with the participants. For example, there was no critical consideration of how the researcher's role could negatively bias and influence the recruitment phase of the study. See table 3 for a review of the quality ratings assigned to each study. See table 4 for quality assessment table.

Table 3: A summary of the included studies

Author, Year	Aim of the study	Sample	Method and	Main findings/themes
& Location	-	Demographics	analysis	_
Bovin et al. (2019), USA	To adopt a qualitative method to develop a more complete understanding of veterans' initial experiences of accessing veteran	N= 80 60 male, 20 female Mean age: 45.8	Qualitative design: semi structured interviews, content analysis	Three themes were highlighted; 1. Onset or worsening of symptoms 2. Facilitators and barriers to getting help 3. Pathways that veterans followed that led them to initiate contact with mental health services
	mental health services	2.% Native American, 8.% Asian/pacific Islander, 21% Black, 62% White, 13% unknown		Bovin et al. (2019) concluded interventions aimed at the identified pathways, in concert with efforts designed to reduce barriers, may increase initiation with veteran mental health services by veterans
Cheney et al. (2018), USA	To identify veteran centric barriers to mental health care to increase initial engagement and continuation with veteran mental health services	N=66 50 male 16 female Mean age: 44.0	Qualitative design: semi structured interviews, cultural domain analysis	Five themes were highlighted; 1. Concern about what others think 2. Financial, personal, physical obstacles 3. Confidence in veteran services 4. Navigating the services benefits 5. Privacy, security, and abuse of services
		7% American Indian, 4% Asian, 18% black, 1% Pacific Islander, 63 % White/not- Hispanic, 10% White/Hispanic, 3% multi-racial, 3% other		Cheney et al. (2018) concluded the study's results reinforce the importance of collaborations between the veteran mental health services and the Department of Defense to address the role of military norms and attitudes in health seeking behaviours
Eliacin et al. (2016), USA	To identify African- American veterans' perspectives of facilitators and barriers to engagement with	N = 49 39 male 10 female Mean age:50.6	Qualitative design: semi structured interviews, grounded theory	1.Patient related factors towards engagement; individual characteristics, behaviour, skills, strategies, health beliefs, previous health experiences, health conditions 2.Provider related factors towards engagement;

	veteran mental health services	100% African American		patient provider relationship, skills & training, attitudes, beliefs, communication style, caseload, burnout, clinical context 3.Organizational related factors towards engagement; Health policies, resources, patient engagement programs, physical and social environment that encourages patient engagement Eliacin et al. (2016) suggested the data emphasises the role of providers in facilitating sustained involvement of patients in their own care
Fischer et al. (2016), USA	To better understand the attitudes and, beliefs and values that influence the use of veteran mental health case among rural veterans.	N = 25 19 male 6 female Mean age:55.0 80% White, 20% Black	Qualitative design: semi structured interviews, content analysis and constant comparison	Seven barriers to engagement were highlighted; 1. Military cultural norms 2. Rural cultural norms 3. Male gender role expectations 4. Religious constraints 5. Stoicism 6. Stigma 7. Lack of trust in services Fischer et al. (2016) concluded attitudes and values commonly associated with rural culture may play and important role in the underutilisation of veteran mental health services
Mellotte et al. (2017), UK	To understand more about the barriers that prevent veterans from seeking professional help from veteran mental health services	N=17 (all male) Mean age: 51.1 99% White British, 1% Black Caribbean	Qualitative design: semi structured interviews, grounded theory	Five barriers to engagement were highlighted; 1. Insight 2. Self-stigma 3. Public stigma 4. Practical 5. Health service and professionals Mellotte et al. (2017) suggested veteran mental health services can play an important role in opposing stigma and promoting engagement

Westermeyer et al. (2002), USA	To understand why Native American veterans choose not to use veteran mental health services	N=573 495 male 78 female Mean age:47 100% Native Americans	Mixed methods: Outcome measures, ANOVA's, Interviews, coded themes based on previous research that identified veteran centric barriers	Barriers to engagement focused upon the system, the veteran, the community and the staff who work at veteran mental health services. Westermeyer et al. (2002) identified the following key barriers to engagement; problems using or accessing the service, the absence of services in Native American communities, inadequate resources to access VA services, Staff lacking skills/familiarity within Native American Veterans, family/community stigma towards veterans with mental health problems.
Owens et al. (2009), USA	The study was exploratory in nature and aimed to examine mental health symptoms, mental health service use in the past year, and reported barriers to service use for female veterans of Iraq and Afghanistan.	N=50 (All female) mean age: 34.7 74% Caucasian, 8% African American, 8% Hispanic, 4% American Indian, 6% other races and ethnicities	Mixed methods: outcome measures descriptive statistics, T-test, interviews, coded themes (exact process not mentioned)	The study highlighted key themes which represented barriers to engagement with veteran mental health services; Long waiting periods for appointments: facilitators not being sensitive to female difficulties, civilians not understanding and not being believed about their symptoms. Owens et al. (2009) concluded a need for treatment for female veterans with mental health concerns, but a significant gap remains in the self-reported need for assistance and seeking of services
True et al. (2014), USA	To identify the barriers to veteran mental health services. In order to generate dialogue between veterans, health service researchers, health care providers, and organizational leadership to inform intervention development	N=29 23 male 6 female Mean age: 31.0 34% African American, 10% Hispanic Latino, 3% Native Hawaiian/Pacific Islander, 3% Asian, 6% Mixed race/ethnicity, 41% White American.	Qualitative design: Photovoice analysis, which comprises of participant interviews and photos taken by participants that reflect their experiences. Transcribed interviews are then coded	The study highlighted three key themes; 1. Key aspects of military culture and identity can deter help seeking 2. Veterans' symptoms and coping strategies as barriers to mental health care 3. Negative health care encounters contribute to avoidance and abandonment of treatment True et al. (2015) concluded given the lack of veterans engaged with veteran mental health services the current themes provide relevant findings for care providers and policy makers

Table 4: Quality Assessment table

	Quality Criteria											
Articles (First Author, Year)	(1) Aim	(2) Methods	(3) Design	(4) Recruitment	(5) Data collection	(6) Researcher role	(7) Ethics	(8) Data Analysis	(9) Findings	(10) Value	Total score	Global Rating
Bovin (2019)	1	1	1	1	1	0	0.5	1	1	1	8.5	Mod
Cheney (2018)	1	1	1	1	1	0	0.5	1	1	1	8.5	Mod
Eliacin (2016)	1	1	1	1	0.5	0	0	1	1	1	7.5	Mod
Fischer (2016)	1	1	1	1	1	0	0	1	1	1	8	Mod
Mellotte (2017)	1	1	1	1	1	0	1	1	1	1	9	High
Westermeyer (2002)	1	1	1	1	1	0	0.5	0	1	1	7.5	Mod
Owens (2009)	1	1	1	1	1	0	0.5	0	1	1	7.5	Mod
True (2015)	1	1	1	1	1	0	0.5	1	1	1	8.5	Mod

Scoring System

1 - yes, 0.5 - unsure, 0 - No. High quality paper (9-10 points), Moderate quality paper (7.5 - 9 points), Low quality paper (less than 7.5 points), Exclude (less than 6 points).

3.2 Line of argument 1 - A lack of trust in services

This first line of argument (meta-theme) makes reference to the lack of trust a veteran displays towards veteran mental health services. Key themes within this line of argument which represent specific barriers to engagement are; (1) the importance of trained professionals, (2) long waiting times to be seen and (3) a lack of useful service information. The current author proposes that these named barriers are likely to impact veterans' perceptions of mental health services. Given the sense of community within the veteran population (Thomas & Bowie, 2016), veteran centric barriers to engagement will be known by many.

1. The importance of trained professionals

This shared barrier refers to the high value a veteran places on engaging with a trained mental health professional. Professionals who do not possess the attributes and knowledge listed below evoke a negative experience that can act as a barrier towards service engagement. There was a strong preference for professionals who wanted to take their time to connect with the veteran without jumping to conclusions. To employ an approach whereby the professional was honest with the veteran was welcomed:

"don't rush or be so judgmental, like you automatically know what's going on with me...I don't want to hear you tell me you know what's going on with me...(after) 30 minutes. Take time and get to know what's going on...I would appreciate it if (you say) "well, gee why don't you come back for a few more visits and we going to find out because I ain't got no idea what's going on with you right now" (Eliacin et al., 2016, p.255).

This preference for professionals to take their time to connect with the veteran was also present within the below extract. Highlighting it can be overwhelming for the veteran to be asked to recall the entirety of their traumatic memories within a short period of time during one session. The consequences of which can be traumatic:

"So within a space of 10 to 15 minutes, (you're asked to) please remember everything traumatic that happening in the past few years, and then (you) walk outside feeling like you could jump off a bridge or something" (True et al., 2014, p.1450).

Furthermore, prioritising the creation of the therapeutic alliance. Adopting a person centered approach was welcomed:

"I was just nervous; I was scared to death. I didn't know if they were going to put me in a (straight) jacket and put me in a rubber room. (Provider) gave me and introduction. That helped me to relax...she broke the wall down with our introductions and conversation. She asked about me, my family, my likes, my dislikes..." (Eliacin et al., 2016, p.255)

"I was a medic. I know there are bad days, good days, but overall you're supposed to be a caring person if you are in a mental health field... You gotta do protocol, policy. Go ahead and do it, but be more personal... Turn [from the computer] sometime; just engage. Dig a little bit instead of doing the computer thing." (Eliacin et al., 2016, p.256)

In addition, professionals were encouraged to consider the impact of veteran culture.

Being mindful to reflect holistically to evaluate any discrepancies between what is noted within the clinic room and what is observable elsewhere:

"Some of us (veterans) we lie and some of us we lie very well, because I've seen guys here and I've seen 'em at home, on the street, and it's a different thing" (Cheney et al., 2018, p.7)

Finally, a professionals knowledge surrounding diagnostic criteria and therapeutic interventions were also seen as important factors. The absence of such knowledge was seen as a barrier to engagement:

"He just dismissed those (flashbacks) as night terrors (P1). It's not that they don't want to help you, it's that they don't understand what to do (P10)" (Mellotte et al., 2017, p.7).

2. Long waiting times to be seen

Another shared barrier across the studies centred upon the service itself. Specifically, the negative impact of treatment wating times. One veteran reported:

"When I talk to people about getting involved, coming to a meeting that the VA's (provider for mental health treatment) having — come, not just getting in — involved with the American legion, VFW, the traditional buildings you see on the street corner, the answer is almost unanimous: The VA won't do anything for me; it takes 3 months; it causes more pain than it solves" (Fischer et al., 2016, p.434).

The above extract not only highlights a significant wait time to be seen but also illustrates the problem associated with this when they refer to "it causes more pain than it solves" (Fischer et al., 2016, p.434). Further extracts also support the presence of this barrier, illustrating similar experiences along with the negative impact waiting times can have on veteran wellbeing:

"That's the problem with the VA, sometimes you have to wait three weeks, sometimes they don't get you right...My boss, he's always complaining about the VA" (Cheney et al., 2018, p.8).

"It took three months to see a nurse, three months to see a psychiatrist by which point things are getting worse" (Mellotte et al., 2017, p.7).

3. A lack of service information

Adding to the above notion of service related barriers to engagement, the lack of available service information to the veteran was reported to be problematic, as highlighted in the following extracts:

"Lack of information, I guess? I mean we didn't even know we were able to come to the VA until we were veterans for like 5 or 6 years" (Cheney et al., 2018, p.9).

"A lot of times, you feel like you're not getting all the information you need" (True et al., 2014, p.1449).

In addition, further specific concerns were noted regarding the lack of information concerning the range of mental health treatments that were available to the veteran:

"Cause the VA doesn't tell you about the kinds of (mental health) treatments that are available" (Cheney et al., 2018, p.9).

Individual needs were of often ignored towards the end of engagement, adopting an approach that valued speed and a lack of information during the discharge process:

"They do not give you any information when they're getting you out, they just want you stamped out and gone as fast as possible" (Bovin et al.,2019, p.616).

3.3 Line of argument 2 - The role of personal beliefs and attitudes

This second line of argument (meta-theme) refers to the pivotal role personal beliefs and attitudes can play in veteran service engagement. Key themes within this line of argument which represent specific barriers to engagement are; (1) not recognising the problem and (2) stigma.

Given these concepts are individualist, the impact on service engagement varies. However, if a veteran's beliefs and attitudes are stigmatising and lack honesty service engagement is likely to suffer.

1. Not recognising the problem

In contrast to the above service related barriers, a veteran's lack of ability to recognise the problem they are experiencing with their mental health was viewed as a barrier to engagement. This shared barrier that places a level of responsibility on the veteran to be honest with themselves was a crucial step for the below veteran to process:

"I had to be honest and communicate what's going on with me. I had to be able to say (expletive) I need some help (expletive). I think that's the skill that worked for me" (Eliacin et al., 2016, p.256).

The veteran is clear in their reflection that admitting that they needed help was a skill that worked for them. In this example their ability to communicate their difficulty was an important step that facilitated engagement with services. Thus, an approach that fails to recognise individual problems represents a veteran centric barrier to engagement. The attribute and importance of honesty was further validated by another veteran:

"It took me a long time to realise that being strong and putting on a brave face was killing me inside" (True et al., 2014, p.1449).

Furthermore, even if honesty is present, it is often challenging to accurately recognise the symptoms of mental health difficulties:

"I wasn't sure that there was something wrong (P14), I thought I had irritable bowel syndrome, high blood pressure and stress...but as its transpired over the years I had Post Traumatic Stress Disorder" (Mellotte et al., 2017, p.7).

This inability to accurately identify the symptoms of mental health difficulties has obvious negative implications for engagement with mental health services. If the veteran is unaware of their illness this reduces the likelihood of them engaging with veteran mental health services.

2. Stigma

The associated stigma experienced by veterans seeking help was a further patient related barrier to engagement with mental health services. The below extracts from a collection of veterans highlight some of the negative thoughts that were experienced due to stigma:

"Asking for help is hard to do when you have worked so hard to be successful in your career, you don't want to be perceived as weak..." (True et al., 2014, p.1447).

"I felt very embarrassed (P8), I just thought I was going mad (P15), It was a weakness (P13), I thought I was a loser...you know I was useless (P2)" (Mellotte et al., 2017, p.7).

This feeling of embarrassment was further reported by an additional veteran:

"Well, I was embarrassed if anybody else found out about it (getting mental health care)" (Fischer et al., 2016, p.434).

In addition, another veteran reported how they were reluctant to engage with mental health services given they believed that only crazy people engaged with services:

"Well I was out of control, couldn't keep no job, and I was not sleeping at night.

And I had lost a lot of weight and my mother told me to go get me some help, I really didn't want to come because I always heard (mental health clinic) it was crazy people up here so I was not wanting to come up here (to the mental health clinic" (Bovin et al., 2019, p.616).

The above extract shares the stigma that suggests veteran mental health services are for crazy people. Further to this the extract also indicates how this stigma acts as a barrier to engagement with services when they state, "I was not wanting to come up here" (Bovin et al., 2019, p.616), in reference to the mental health service. Finally, the role of the outside world (civilian life) was reported to play a negative role in stigma development:

"You're not able to get help because you're afraid of the stigma put on you by the outside world..." (Cheney et al., 2018, p.7)

Table 5. A completed grid mapping similarities and differences (Phase 3)

Sample & Concepts	Eliacin (2016)	Bovin (2019)	Fischer (2016)	Cheney (2018)	Mellotte (2017)	Westermeyer (2002)	Owens (2009)	True (2014)
Sample	49(39M/10F)	80(60M/20F)	25(19M/6F)	66(50M/16F)	17(17M)	543(Not known)	50(50F)	29(23M/6)
The importance of trained professionals	Do not judge or label me	-	-	Consider the bigger picture	Do not dismiss my experiences	Staff lacking skills/familiarity within Native American Veterans	Facilitators not being sensitive to female difficulties	You are asked to remember so much in the space of 10 to 15 minutes
Long waiting times to be seen	-	-	it takes 3 months, causes more pain than it solves	You have to wait three weeks to be seen	It took three months to see a nurse	-	Long waiting times for appointments	-
A lack of useful service information	-	Service information was vague and unhelpful	-	There is lack of information on what treatments are available; a lack of service knowledge	-	-	-	You feel like you are not getting all the information you need
Not recognising the problem	Recognising that you need help to change	Many patients knew about the service but didn't seek help	-	-	Recognising that there is a problem in the first place	-	-	Putting on a brave face was killing me
Stigma	-	Only crazy people sought help	A feeling of embarrassment if others knew I was getting help	People just think you are crazy without understanding	A feeling of embarrassment and weakness	Family/community stigma towards veterans with mental health	-	You don't want to be perceived as weak

4. Discussion

The aim of this current review was to synthesise qualitative studies that explored veterans' perspectives into the barriers to engagement with veteran mental health services. In order to analyse the obtained data meta-ethnography was chosen as the appropriate form of analysis. As discussed, this interpretative approach was chosen given it is commonly used to analyse qualitative data from groups of people (Boland, et al., 2017) along with being the most frequently used qualitative synthesis approach (Hannes & Macaitis, 2012). The completion of meta-ethnography identified a number of shared concepts along with further lines of arguments which are both summarised below.

4.1 Key findings

The key aim of meta-ethnography is to identify the similarities and differences across each of the included studies, resulting in the identification of meta-themes (lines of argument) that encapsulate further themes. In this current review the themes represent the key barriers to engagement with mental health services for military veterans. Following the completion of meta-ethnography two lines of argument were highlighted. Firstly, a lack of trust in services. Key themes within the line of argument were; (1) the importance of trained professionals, (2) long waiting times to be seen and (3) a lack of useful service information. The second line of argument was labelled

the role of personal beliefs and attitudes. Key themes within the line of argument were;

1) not recognising the problem and (2) stigma.

Line of argument 1 – A lack of trust in services

The concept of trust in services has a strong association with engagement, acting as a barrier if the individual is mistrusting of services (Majumder et al., 2014). Trust is inherently a relational concept, which is influenced by the interactions between organisations, events and people (Gilson, 2003). Therefore, as a concept it is open to influence which services should acknowledge. Taking active steps to promote veteran trust towards services given the close relationship it has with engagement (Majumder et al., 2014).

The importance of trained professionals

The first noted barrier within this line of argument was termed the importance of trained professionals. There were many skills and expertise veterans valued in a trained professional. These noted skills included a preference for professionals to value the development of a therapeutic alliance (Eliacin et al., 2016), to have a solid understanding of diagnostic criteria and therapeutic interventions (Mellotte et al., 2017) and to understand veteran culture (Cheney et al., 2018). The latter of which has been seen to be pivotal within mainstream NHS services in order to provide effective health care to veterans (Mellotte et al., 2017).

The development of a therapeutic alliance is a key process that challenges inaccurate beliefs about mental illness that can hinder engagement (Eliacin et al., 2016). Engagement itself was found to be maintained by a solid therapeutic alliance that did not sacrifice 'human' connection (Eliacin et al., 2016). Therapeutic alliance is frequently downplayed as a pivotal factor in treatment given the movement towards evidence based protocols (Green, 2006). However, the therapeutic alliance is often the most important determinant of treatment success (Kazdin et al.,1990; Karver et al., 2006). Large scale studies have shown service users are interested in the personal qualities of clinicians (Sweeney et al., 2014). Preferring an approach of warmth, empathy and an ability to show interest in their patients as crucial determinants of a therapeutic alliance (Sweeney et al., 2014). The latter of which has received support from previous veteran research (Eliacin et al., 2016).

Veterans report the failure to form a well-connected therapeutic alliance can promote a feeling of invalidation, which increases the probability of service disengagement (Mellotte et al., 2017). More recent quantitative research reinforces this finding, reporting that veterans with higher ratings of therapeutic alliance maintained greater levels of engagement with the service (Goldberg et al., 2020). These findings further highlight the importance of the therapeutic alliance, which previous research has also shown to mediate symptom severity in veterans (Neale & Rosenheck, 1995).

Long waiting times to be seen

Long waiting times to be seen represented the second shared barrier across the included studies. Veterans noted how the excessive wait to be seen was a problematic feature associated with service provision, often having a negative effect on psychological wellbeing and engagement (Mellotte et al., 2017). Previous quantitative methodologies support this finding, reporting an association between poorer health outcomes and waiting times with the veteran community (Pizer & Prentice, 2011). Furthermore, long waiting times to be seen routinely result in patient dissatisfaction (Fogarty & Cronin 2008) and reduce veteran service engagement (Pizer & Prentice, 2011). The implications of this are discussed below.

Commonly, long waits to be seen result in subsequent referrals to additional services (Schraeder & Reid, 2015). Seeking multiple treatments simultaneously evokes emotional distress within the patient and places additional provider costs on the system (Schraeder & Reid, 2015). Upon reaching the top of service waitlists patients then display a lack of motivation towards treatment and diminished expectations of achieving favourable treatment outcomes (Westin et al., 2014). Which is consistent with the stages of change theory, whereby patients enter a precontemplation stage which is influenced by past and current experiences (McConnaughy et al., 1983).

A lack of service information

The third barrier to engagement commented upon the lack of useful service information available to the veteran. Many veterans reported that they were unsure about what mental health treatment services offered or even that the service existed at all (Cheney et al., 2018). Further specific difficulties made reference to the lack of guidance on how to access the service or if they were presented with some information how this was vague and unhelpful (Bovin et al., 2019). Previous research within community samples found similar results, reporting patients are often not provided with sufficient information concerning the available treatment (Sadare, 2011). Thus, patients do not understand the available treatment based on the information provided, therefore they did not proceed towards engagement (Sadare, 2011). These noted concerns demonstrate on a practical level that if the appropriate information is not accessible to the veteran this can act as a barrier towards service engagement.

Line of argument 2 – The role of personal beliefs and attitudes

The role of personal beliefs and attitudes of veterans represented one line of argument. Both of which have been shown to be key factors that promote treatment engagement with health care interventions (Rodriguez, 2013). As patients are expected to take on a more active role in their health care (Horne, 1999), their beliefs towards service engagement are key in this process. It is understood the patients'

beliefs towards engagement centre upon a twofold structure in which the patients' perception of the problem and possible solutions are considered in parallel (Horne, 1999). During this process the perceived necessity for engagement and adverse risks of engaging are reflected upon (Horne & Weinman, 1999).

Recognising the problem

The first barrier within this line of argument was intrinsic in its presentation. Specifically, the difficultly veterans had in recognising mental health difficulties. Many veterans found the ability to recognise that there is a problem a real challenge which can contradict their own concept of masculinity (Eliacin et al., 2016). More current research expands upon this notion of masculinity, which they refer to as hyper masculinity. A learned concept adopted within the military environment and subsequently is associated with a range of negative consequences in civilian life (Semaan et al., 2017). Often the consequences of not recognising their own difficulties are significant, with some veterans reporting that they would have been in prison if they did not recognise their own challenges (Mellotte et al., 2017). Engagement with services is likely to suffer if the veteran fails to recognise the mental health challenges that they are faced with. Conversely, the ability to be honest and to recognise that the problem exists has been found to be instrumental in recovery from mental ill health (Eliacin et al., 2016).

Stigma

The final barrier related to the stigma associated with engagement in mental health services within the veteran population. Firstly, there was a reported feeling of embarrassment if other veterans knew that they were engaged with mental health services (Fischer et al., 2016). In some cases this reported feeling of embarrassment was connected to a sense of weakness (Mellotte et al., 2017). This feeling of weakness associated with help seeking behaviour is suggested to be a direct consequence of a military narrative whereby service members are expected to be tough and to shut down difficult feelings (Creamer & Forbes, 2004). Furthermore, this military narrative which places an emphasis on toughness has been suggested to be key in creating a reluctance within veterans to seek help from services due to a fear of being judged by others (Kulesza et al., 2015).

Adding to this, the belief that only crazy people engage with services was also a key feature of the reported stigma that inhibited engagement in mental health services (Bovin et al., 2019). This notion that only crazy people seek help from services is a clear example of public stigma, the impact of which has been shown to reduce treatment utilization within the veteran population (Kulesza et al., 2015). In this reported study of 812 adult veterans, higher levels of perceived public stigma of treatment seeking was significantly related to lower treatment utilization. This finding is not only limited to veteran samples but has also been replicated across samples involving active service members (Kim et al., 2011). Thus, empirical evidence suggests both active service members and veterans are concerned about the

perceived public stigma, such as appearing weak, if they were to engage with mental health services (Kulesza et al., 2015). The impact of stigma is conclusive, having serious consequences on service engagement (Kulesza et al., 2015). With this in mind campaigns to reduce stigma are welcomed, which the current author expands upon below.

4.2 Strengths and limitations

Although this current review excluded grey literature given it is opinion driven and biased (Benzies et al., 2006), it is possible appropriate studies were excluded from the review. Furthermore, while complementary search methods did not yield the inclusion of any additional studies this process is not quantifiably rigorous in nature. Thus, there is a potential for the accidental omission of appropriate studies due to human error. Finally, given this review included studies with a varying degree of theoretical and analytical approaches some authors may view this as a limitation of the review (Dixon-Woods et al., 2004). Preferring the included studies to have comparable methodologies. However, with that being said not all authors would see this methodological variable as a limitation (Dixon-Woods et al., 2004). Thus, welcoming studies with differential forms of qualitative analysis.

Furthermore, within a review of this type it is assumed that each of the included studies are commensurable regarding context, point in time and setting; however, these assumptions are not true regrading this current project. Therefore, not all qualitative researchers would endorse such a project (Britten et al., 2002). However, some authors have shown that some aspects of studies are simply incommensurable

(Lyotard, 1984). Thus, under this postmodernist stance this current review would be welcomed by academic audiences.

In addition, it is realistic to presume that each of the included studies are likely to contain their own biases and associated limitations which therefore limits the generalisability of their conclusions. Which in turn is obviously a limiting factor of this current review. Furthermore, for the purpose of this review veterans were viewed as a homogenous group. However, the author would like to acknowledge a potential limitation with this viewpoint given the probable diversity within the veteran population due to the many different branches of service. However, this finding is yet to be confirmed by research. Given the severe lack of research specific to each branch of service the author was encouraged to view all veterans as one homogenous group due this limitation within veteran research. Moving forward, if veterans are proven to have a wide degree of heterogeneity further authors may want to complete reviews specific to each branch of service.

Phase 2 of the meta-ethnography involved coding themes within each paper. This was completed via the use of a table utisling the published transcript within each paper to generate themes (see appendix 3). Two studies (Westermeyer et al., 2002; Owens et al., 2009) did not contain transcript within their publication. Despite both papers passing quality assessment the decision not to publish transcript is a limitation associated with both of these studies. In the absence of published transcript the author noted down the themes as they were referred to within the studies prior to moving onto phase 3 of the synthesis. The current author acknowledges that this could reflect a limitation within this review given the lack of consistency within this phase of meta-

ethnography. However, the primary aim of phase 2 is designed to identify key themes within the papers, which this review achieved. The exact mechanistic steps behind this phase varies across meta-ethnographies, with authors adopting an individual approach towards the completion of this phase of meta-ethnography (Lee et al., 2015). Although there are published phases of meta-ethnography, question marks still remain concerning the "right way to do meta-ethnography" (Lee et al., 2015, p346). Further research is needed to explore this limitation in greater depth.

Finally, the low number of included studies (eight) within the synthesis suggests the results and the below implications have to be read with caution. Readers should be aware stated implications are based on a limited number of studies which the author suggests is due to the reviews qualitative design and the small publication base that exists within veteran research. Furthermore, only one of the eight included studies was conducted within the UK. Therefore, restricting the impact of the stated implications of this current review within a UK setting. It is possible the noted barriers to engagement could solely be unique to US veterans. Patient demographics also varied across the studies with an overrepresentation of males within the review. In addition, some of the included studies solely focused on specific groups of veterans which may not be representative of the wider veteran population (Westermeyer et al., 2002; Fischer et al., 2016; Eliacin et al. 2016). All of these factors reinforce the above point, encouraging readers to adopt a level of caution when interpreting the reviews results and implications.

In contrast to these above limitations the review should also be commended for its strengths. Firstly, this review is novel regarding the aim and design. Furthermore, it is conducted in a population that historically lacks published research which is reflected in the small number of studies included in this current review. Therefore, this current review which aims to address this publication imbalance should be viewed as a positive step forward towards overcoming this publication imbalance. Furthermore, the inclusion of the scoring criteria proposed by Butler et al., (2016), which was applied during the quality assessment process can be viewed as a methodological advantage of the review given this is an area of qualitative reviews which are often highly contested (Murphy et al., 1998).

4.3 Clinical and service implications

Despite the limitations noted above it is evident that there are a number of barriers to engagement with mental health services for veterans. A major implication from this review focuses upon the services themselves. Services that aim to engage the veteran population in mental health care are encouraged to reflect on the findings from this review. Specifically, to reflect on service provision to consider making changes to overcome these reported barriers. For example, for clinicians to be given the time to prioritise the development of a therapeutic alliance between themselves and the veteran. Where possible, staff should be prompted to adopt a listening stance during the initial phase of therapy. One that aims to connect with the veteran on a personal level, without jumping to conclusions so early on in therapy given the negative impact this can have on the therapeutic relationship.

In addition, services are encouraged to review the documentation available to veterans regarding service provision. Following this review, the available documentation should be both concise and accurate, providing clear information on the range of mental health treatments the service provides. Furthermore, for services to seek funding for additional staff or to implement new ways of working to address the long waiting times to be seen. Given funding is often challenging to secure, the implementation of groups could be considered whilst the veteran is waiting for individual therapy. It is imperative proactive steps are taken to reduce waiting times to be seen due to the significant impact it has on psychological wellbeing, service engagement and satisfaction (Mellotte et al., 2017; Pizer et al., 2011; Fogarty et al., 2008).

Regarding the additional barriers of stigma and the veteran's ability to recognise the problem the author encourages global action to overcome these barriers. Action will be required to be conducted on a national level, requiring collaboration across the departments of government. National campaigns could be designed to reduce the perceived stigma and to improve the individual's ability to recognise the signs of mental ill health. The expertise of service users should be included in any national campaigns.

4.4. Suggestions for future research

Building upon the methodological limitations noted above, further research could be conducted to explore the barriers to mental health services for veterans from a variety of branches from across the armed forces. It would be of clinical interest to determine whether or not there are unique barriers to certain veterans who served from specific branches from the armed forces. Currently, services and research view military veterans as a homogenous population whereas this current author argues that there is likely to be a variety of heterogeneity within this population that is not currently recognised. However, research would have to confirm that there is a wide range of heterogeneity in veterans prior to conducting any review.

In addition, given the limitations associated with qualitative reviews, it would be beneficial for research to conduct a quantitative review into the barriers to engagement in mental health services for the veteran population. Finally, due to nature of the research question being explored it was only appropriate to conduct a review that solely focused on the experience of veterans. However, in order to capture a more comprehensive understanding it would be important to acquire the perspectives from both clinicians and the family members who support veterans. By completing a project of this type this would provide a more comprehensive insight into the veteran centric barrier to service engagement.

4.5 Conclusions

At the point of writing this review this is the first systematic review into the barriers to engagement with mental health services as reported by military veterans. The review was in unique in nature, highlighting two lines of argument (a lack of trust in the services and the role personal beliefs) with subsequent barriers to engagement which

encapsulate each line of argument (the importance of trained professionals, long wating times to be seen, a lack of service information, recognising the problem, and stigma)

However, with this being said several limitations were noted, most commonly associated with the reported methodological limitations associated with qualitative systematic reviews. Along with overcoming these limitations the current author strongly encourages further research to be conducted exploring the probable differences within the veteran population. In addition, the current author would welcome further research to include the views from both clinicians and family members of veterans. By doing so, acquiring a more comprehensive insight into the barriers to engagement with mental health services for veterans. Finally, the review highlights many clinical and service implications which provide practical suggestions that are designed to overcome the noted barriers that this review commented on.

4.6 Conflict of interest

This research was conducted and funded as part of the author's Doctoral Degree in Clinical Psychology at the University of Edinburgh, the fees of which were paid for by the NHS Education for Scotland (NES).

References

- Atkins, S., Lewin, S., Smith, H., Engel, M., Fretheim, A., & Volmink, J. (2007). Conducting a meta-ethnography of qualitative literature: Lessons learnt. *BMC Medical Research Methodology*, 8(1). https://doi.org/10.1186/1471-2288-8-21
- Bardes, C. L. (2012). Defining "Patient-Centered Medicine." *New England Journal of Medicine*, 366(9), 782–783. https://doi.org/10.1056/nejmp1200070
- Barker, C., Pistrang, N., & Elliott, R. (2015). Research Methods in Clinical Psychology: An Introduction for Students and Practitioners (3rd ed.). Wiley-Blackwell.
- Benzies, K. M., Premji, S., Hayden, K. A., & Serrett, K. (2006). State-of-the-Evidence Reviews: Advantages and Challenges of Including Grey Literature. *Worldviews on Evidence-Based Nursing*, *3*(2), 55–61. https://doi.org/10.1111/j.1741-6787.2006.00051.x
- Boland, A., Cherry, G., & Dickson, R. (2017). *Doing a Systematic Review: A Student's Guide* (Second ed.). SAGE Publications Ltd.
- Bovin, M. J., Miller, C. J., Koenig, C. J., Lipschitz, J. M., Zamora, K. A., Wright, P. B., Pyne, J. M., & Burgess, J. F. (2019). Veterans' experiences initiating VA-based mental health care. *Psychological Services*, *16*(4), 612–620. https://doi.org/10.1037/ser0000233
- Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: a worked example. *Journal of Health Services Research & Policy*, 7(4), 209–215. https://doi.org/10.1258/135581902320432732
- Brown, M. C., Creel, A. H., Engel, C. C., Herrell, R. K., & Hoge, C. W. (2011). Factors Associated With Interest in Receiving Help for Mental Health Problems in Combat Veterans Returning From Deployment to Iraq. *Journal of Nervous & MentalDisease*, 199(10)797–801https://doi.org/10.1097/nmd.0b013e31822fc9bf
- Butler, A., Hall, H., & Copnell, B. (2016). A Guide to Writing a Qualitative Systematic Review Protocol to Enhance Evidence-Based Practice in Nursing and Health Care. *Worldviews on Evidence-Based Nursing*, 13(3), 241–249. https://doi.org/10.1111/wvn.12134
- Cahill, M., Robinson, K., Pettigrew, J., Galvin, R., & Stanley, M. (2018). Qualitative synthesis: A guide to conducting a meta-ethnography. *British Journal of Occupational Therapy*, *81*(3), 129–137. https://doi.org/10.1177/0308022617745016
- Campbell, R., Pound, P., Pope, C., Britten, N., Pill, R., Morgan, M., & Donovan, J. (2003). Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Social Science & Medicine*, *56*(4), 671–684. https://doi.org/10.1016/s0277-9536(02)00064-3

- Centre for Reviews and Dissemination, (2009). CRD's guidance for undertaking reviews in health care. York; Centre for Reviews and Dissemination. Accessed: https://www.york.ac.uk/media/crd/Systematic_Reviews.pdf
- Cheney, A. M., Koenig, C. J., Miller, C. J., Zamora, K., Wright, P., Stanley, R., Fortney, J., Burgess, J. F., & Pyne, J. M. (2018). Veteran-centered barriers to VA mental healthcare services use. *BMC Health Services Research*, *18*(1). https://doi.org/10.1186/s12913-018-3346-9
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO. *Qualitative Health Research*, 22(10), 1435–1443. https://doi.org/10.1177/1049732312452938
- Cosco, T. D., Prina, A. M., Perales, J., Stephan, B. C. M., & Brayne, C. (2013). Lay perspectives of successful ageing: a systematic review and meta-ethnography. *BMJ Open*, *3*(6), e002710. https://doi.org/10.1136/bmjopen-2013-002710
- Critical Appraisal Skills Programme (2018). CASP Qualitative Checklist. [online] Availableat:https://casp-uk.net/wp-content/uploads/2018/01/CASP-QualitativeChecklist.pdf.
- Creamer, M., & Forbes, D. (2004). Treatment of posttraumatic stress disorder in military and veteran populations. *Psychotherapy: Theory, Research, Practice, Training*, *41*(4), 388–398. https://doi.org/10.1037/0033-3204.41.4.388
- Dixon-Woods, M., & Fitzpatrick, R. (2001). Qualitative research in systematic reviews. *BMJ*, 323(7316), 765–766. https://doi.org/10.1136/bmj.323.7316.765
- Dixon-Woods, M., Shaw, R. L., Agarwal, S., & Smith, J. A. (2004). The problem of appraising qualitative research. *Quality and Safety in Health Care*, *13*(3), 223–225. https://doi.org/10.1136/qshc.2003.008714
- Eliacin, J., Rollins, A. L., Burgess, D. J., Salyers, M. P., & Matthias, M. S. (2016). Engaging African-American Veterans in Mental Health Care. *Journal of Nervous & Mental Disease*, 204(4), 254–260. https://doi.org/10.1097/nmd.0000000000000479
- EndNote. (2021, June 24). EndNote | The best reference management tool. https://endnote.com/
- Evans, D. (2002). Database searches for qualitative research. *Journal of the Medical Library Association*, 90(3), 290–293. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC116400/
- Fischer, E. P., McCarthy, J. F., Ignacio, R. V., Blow, F. C., Barry, K. L., Hudson, T. J., Owen, R. R., & Valenstein, M. (2008). Longitudinal Patterns of Health System Retention Among Veterans with Schizophrenia or Bipolar Disorder. *Community Mental Health Journal*, *44*(5), 321–330. https://doi.org/10.1007/s10597-008-9133-z

- Fischer, E. P., McSweeney, J. C., Wright, P., Cheney, A., Curran, G. M., Henderson, K., & Fortney, J. C. (2016). Overcoming Barriers to Sustained Engagement in Mental Health Care: Perspectives of Rural Veterans and Providers. *The Journal of Rural Health*, 32(4), 429–438. https://doi.org/10.1111/jrh.12203
- Fogarty, C., & Cronin, P. (2008). Waiting for healthcare: a concept analysis. *Journal of Advanced Nursing*, *61*(4), 463–471. https://doi.org/10.1111/j.1365-2648.2007.04507.x
- Gerteis, M. (2002). Through the Patient's Eyes: Understanding and Promoting Patient-Centered Care (1st ed.). Jossey-Bass
- Gilson, L. (2003). Trust and the development of health care as a social institution. Social Science & Medicine, 56(7), 1453–1468. https://doi.org/10.1016/s0277-9536(02)00142-9
- Goetter, E. M., Bui, E., Ojserkis, R. A., Zakarian, R. J., Brendel, R. W., & Simon, N. M. (2015). A Systematic Review of Dropout From Psychotherapy for Posttraumatic Stress Disorder Among Iraq and Afghanistan Combat Veterans. *Journal of Traumatic Stress*, 28(5), 401–409. https://doi.org/10.1002/jts.22038
- Goodwin, F. K., Alfred, D. C., Coyle, J. T., Fox, J. C., Hollings, R. L., Jackson, J. S., Lagomarsino, N., Matarazzo, J. D., McGaugh, J. L., Purpura, D. P., Shumway, D. L., Tucker, G. J., Healy, B., Suchinsky, R. T., & Scaramozzino, J. A. (1993). Health care reform for Americans with severe mental illnesses: report of the National Advisory Mental Health Council. *American Journal of Psychiatry*, 150(10), 1447–1465. https://doi.org/10.1176/ajp.150.10.1447
- Goldberg, S. B., Rowe, G., Malte, C. A., Ruan, H., Owen, J. J., & Miller, S. D. (2020). Routine monitoring of therapeutic alliance to predict treatment engagement in a Veterans Affairs substance use disorders clinic. *Psychological Services*, 17(3), 291–299. https://doi.org/10.1037/ser0000337
- Gorman, L. A., Blow, A. J., Ames, B. D., & Reed, P. L. (2011). National Guard Families After Combat: Mental Health, Use of Mental Health Services, and Perceived Treatment Barriers. *Psychiatric Services*, *62*(1), 28–34. https://doi.org/10.1176/ps.62.1.pss6201_0028
- Green, J. (2006). Annotation: The therapeutic alliance a significant but neglected variable in child mental health treatment studies. *Journal of Child Psychology and Psychiatry*, 47(5), 425–435. https://doi.org/10.1111/j.1469-7610.2005.01516.x
- Greenberg, N. (2014). What's so special about military veterans? *International Psychiatry*, *11*(4), 81–83. https://doi.org/10.1192/s174936760000463x

- Grayson, L., & Gomersall, A. (2003). A difficult business: Finding the evidence for social science reviews. London, UK: ESRC UK Centre for Evidence Based Policy and Practice. Retrievedfromhttp://www.kcl.ac.uk/sspp/departments/politicaleconomy/research/cep/pubs/papers/assets/wp19.pdf
- Hannes, K., & Lockwood, C. (2011). Synthesizing Qualitative Research: Choosing the Right Approach (1st ed.). BMJ Books
- Hannes, K., & Macaitis, K. (2012). A move to more systematic and transparent approaches in qualitative evidence synthesis: update on a review of published papers. *Qualitative Research*, *12*(4), 402–442. https://doi.org/10.1177/1468794111432992
- Horne, R. (1999). Patients' beliefs about treatment. *Journal of Psychosomatic Research*, 47(6), 491–495. https://doi.org/10.1016/s0022-3999(99)00058-6
- Horne, R., & Weinman, J. (1999). Patients' beliefs about prescribed medicines and their role in adherence to treatment in chronic physical illness. *Journal of Psychosomatic Research*, *47*(6), 555–567. https://doi.org/10.1016/s0022-3999(99)00057-4
- House Of Commons Defence Committee. (2019). *Mental health and the Armed Forces, Part Two: The Provision of Care*.Publications.Parliament.Uk. Retrieved July 24, 2022, from https://publications.parliament.uk/pa/cm201719/cmselect/cmdfence/1481/148 1.pdf
- Iversen, A., Dyson, C., Smith, N., Greenberg, N., Walwyn, R., Unwin, C., Hull, L., Hotopf, M., Dandeker, C., Ross, J., & Wessely, S. (2005). 'Goodbye and good luck': the mental health needs and treatment experiences of British ex-service personnel. *British Journal of Psychiatry*, 186(6), 480–486. https://doi.org/10.1192/bjp.186.6.480
- Iversen, A. C., van Staden, L., Hughes, J. H., Greenberg, N., Hotopf, M., Rona, R. J., Thornicroft, G., Wessely, S., & Fear, N. T. (2011). The stigma of mental health problems and other barriers to care in the UK Armed Forces. *BMC Health Services Research*, *11*(1). https://doi.org/10.1186/1472-6963-11-31
- Johnson, P. J., Carlson, K. F., & Hearst, M. O. (2010). Healthcare Disparities for American Indian Veterans in the United States. *Medical Care*, *48*(6), 563–569. https://doi.org/10.1097/mlr.0b013e3181d5f9e1
- Joanna Briggs Institute (2014). *The Systematic Review of Economic Evaluation Evidence*. Joanna Briggs Institute. Retrieved June 24, 2022, from https://nursing.lsuhsc.edu/JBI/docs/ReviewersManuals/Economic.pdf

- Karver, M., Handelsman, J., Fields, S., & Bickman, L. (2006). Meta-analysis of therapeutic relationship variables in youth and family therapy: The evidence for different relationship variables in the child and adolescent treatment outcome literature. *Clinical Psychology Review*, 26(1), 50–65. https://doi.org/10.1016/j.cpr.2005.09.001
- Kazdin, A. E., Siegel, T. C., & Bass, D. (1990). Drawing on clinical practice to inform research on child and adolescent psychotherapy: Survey of practitioners. *Professional Psychology: Research and Practice*, *21*(3), 189–198. https://doi.org/10.1037/0735-7028.21.3.189
- Kessler, R. C. (2000). Post-traumatic stress disorder: The burden to the individual and to society. *J Clin Psychiatry*, *61*, 4–12. https://www.psychiatrist.com/read-pdf/14866/
- Kessler, R. C., Berglund, P. A., Bruce, M. L., Koch, J. R., Laska, E. M., Leaf, P. J., Manderschied, R. W., Rosenheck, R. A., Walters, E. E., & Wang, P. S. (2001). The Prevalence and Correlates of Untreated Serious Mental Illness. *Health Service Research*, 36(6), 987–1007. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089274/pdf/hsresearch00007-0020.pdf
- Khan, K. S., Kunz, R., Kleijnen, J., & Antes, G. (2003). Five steps to conducting a systematic review. *JRSM*, 96(3), 118–121. https://doi.org/10.1258/jrsm.96.3.118
- Kim, P. Y., Britt, T. W., Klocko, R. P., Riviere, L. A., & Adler, A. B. (2011). Stigma, Negative Attitudes About Treatment, and Utilization of Mental Health Care Among Soldiers. *Military Psychology*, 23(1), 65–81. https://doi.org/10.1080/08995605.2011.534415
- Kreyenbuhl, J., Nossel, I. R., & Dixon, L. B. (2009). Disengagement From Mental Health Treatment Among Individuals With Schizophrenia and Strategies for Facilitating Connections to Care: A Review of the Literature. *Schizophrenia Bulletin*, *35*(4), 696–703. https://doi.org/10.1093/schbul/sbp046
- Kulesza, M., Pedersen, E. R., Corrigan, P. W., & Marshall, G. N. (2015). Help-Seeking Stigma and Mental Health Treatment Seeking Among Young Adult Veterans. *Military Behavioral Health*, 3(4), 230–239. https://doi.org/10.1080/21635781.2015.1055866
- Lee, R. P., Hart, R. I., Watson, R. M., & Rapley, T. (2015). Qualitative synthesis in practice: some pragmatics of meta-ethnography. *Qualitative Research*, *15*(3), 334–350. https://doi.org/10.1177/1468794114524221
- Lyotard, J. F. (1984). The Postmodern Condition A Report on Knowledge. *Manchester University Press*, 1–13. https://yunus.hacettepe.edu.tr/~jason.ward/ied485britnovel4/The%20Postmodern%20Condition%20by%20Jean-Francois%20Lyotard.pdf

- Majumder, P., O'Reilly, M., Karim, K., & Vostanis, P. (2014). 'This doctor, I not trust him, I'm not safe': The perceptions of mental health and services by unaccompanied refugee adolescents. *International Journal of Social Psychiatry*, *61*(2), 129–136. https://doi.org/10.1177/0020764014537236
- McCarthy, J. F., Blow, F. C., Valenstein, M., Fischer, E. P., Owen, R. R., Barry, K. L., Hudson, T. J., & Ignacio, R. V. (2007). Veterans Affairs Health System and Mental Health Treatment Retention among Patients with Serious Mental Illness: Evaluating Accessibility and Availability Barriers. *Health Services Research*, 42(3p1), 1042–1060. https://doi.org/10.1111/j.1475-6773.2006.00642.x
- McConnaughy, E. A., Prochaska, J. O., & Velicer, W. F. (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research & Practice*, *20*(3), 368–375. https://doi.org/10.1037/h0090198
- Mellotte, H., Murphy, D., Rafferty, L., & Greenberg, N. (2017). Pathways into mental health care for UK veterans: a qualitative study. *European Journal of Psychotraumatology*,8(1),1389207.https://doi.org/10.1080/20008198.2017.1389207
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097
- Murphy, E., Dingwall, R., Greatbatch, D., Parker, S., & Watson, P. (1998). Qualitative research methods in health technology assessment: a review of the literature. Health Technology Assessment, 2(16). https://doi.org/10.3310/hta2160
- Neale, M. S., & Rosenheck, R. A. (1995). Therapeutic alliance and outcome in a VA intensive case management program. *Psychiatric Services*, *46*(7), 719–721. https://doi.org/10.1176/ps.46.7.719
- Noblit, G. W., & Hare, D. R. (1988). *Meta-Ethnography: Synthesizing Qualitative Studies (Qualitative Research Methods)* (1st ed.). SAGE Publications, Inc.
- Oster, C., Morello, A., Venning, A., Redpath, P., & Lawn, S. (2017). The health and wellbeing needs of veterans: a rapid review. *BMC Psychiatry*, *17*(1). https://doi.org/10.1186/s12888-017-1547-0
- Owens, G. P., Herrera, C. J., & Whitesell, A. A. (2009). A preliminary investigation of mental health needs and barriers to mental health care for female veterans of Iraq and Afghanistan. *Traumatology*, 15(2), 31–37. https://doi.org/10.1177/1534765609336361
- Paterson, B. L., Thorne, S. E., Canam, C., & Jillings, C. (2001). *Meta-Study of Qualitative Health Research: A Practical Guide to Meta-Analysis and Meta-Synthesis (Methods in Nursing Research)* (1st ed.). SAGE Publications, Inc.

- Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. M. (2009). Perceived Stigma and Barriers to Mental Health Care Utilization Among OEF-OIF Veterans. *Psychiatric Services*, *60*(8), 1118–1122. https://doi.org/10.1176/ps.2009.60.8.1118
- Pittman, J. O. E., Goldsmith, A. A., Lemmer, J. A., Kilmer, M. T., & Baker, D. G. (2011). Post-traumatic stress disorder, depression, and health-related quality of life in OEF/OIF veterans. *Quality of Life Research*, 21(1), 99–103. https://doi.org/10.1007/s11136-011-9918-3
- Pizer, S. D., & Prentice, J. C. (2011). What Are the Consequences of Waiting for Health Care in the Veteran Population? *Journal of General Internal Medicine*, 26(S2), 676–682. https://doi.org/10.1007/s11606-011-1819-1
- Pontius, R. G., & Millones, M. (2011). Death to Kappa: birth of quantity disagreement and allocation disagreement for accuracy assessment. *International Journal of Remote Sensing*, 32(15), 4407–4429. https://doi.org/10.1080/01431161.2011.552923
- Pope, C., Van Royen, P., & Baker, R. (2002). Qualitative methods in research on healthcare quality. *Quality and Safety in Health Care*, 11(2), 148–152. https://doi.org/10.1136/qhc.11.2.148
- Rhead, R., Nicola, F., Greenberg, N., Goodwin, L., & MacManus, D. (2020). *The mental health and treatment needs of UK ex-military personnel*. King College London. Retrieved June 24, 2022,from https://kclpure.kcl.ac.uk/portal/files/161242007/20201012_KCL_UoL_MH_Tre atment Needs final report digital.pdf
- Rodriguez, K. M. (2013). Intrinsic and Extrinsic Factors Affecting Patient Engagement in Diabetes Self-Management: Perspectives of a Certified Diabetes Educator. *Clinical Therapeutics*, *35*(2), 170–178. https://doi.org/10.1016/j.clinthera.2013.01.002
- Sadare, O. (2011). Evaluation of Community Engagement in the Design and Delivery of Health Promotion Interventions. University of East London. Retrieved June 24, 2022, from https://repository.uel.ac.uk/download/ecaa24b04fb81476289678bc365666e56 111c2705d3934912f337078e4ee8594/17014048/OLAMIDE_SADARE_PHD_2012 (Highlighted)%5B1%5D.pdf
- Schnurr, P. P., & Green, B. L. (2004). Understanding relationships among trauma, post-traumatic stress disorder, and health outcomes. *American Psychological Association*, 247–275. https://doi.org/10.1037/10723-010
- Schraeder, K. E., & Reid, G. J. (2015). Why Wait? The Effect of Wait-Times on Subsequent Help-Seeking Among Families Looking for Children's Mental Health Services. *Journal of Abnormal Child Psychology*, *43*(3), 553–565. https://doi.org/10.1007/s10802-014-9928-z

- Scottish Government (2012). Our commitments. Scottish government support for the Armed Forces community in Scotland. Scotgov. Retrieved June 24, 2022, from https://digital.nls.uk/pubs/scotgov/2012/9781782560364.pdf
- Semaan, B., Britton, L. M., & Dosono, B. (2017). Military Masculinity and the Travails of Transitioning: Disclosure in Social Media. *Cooperative Work and Social Computing*, 387–403. https://doi.org/10.1145/29981812998221
- Shalev, A. Y. (1997). Treatment Failure in Acute PTSD. *Annals of the New York Academy of Sciences*, 821(1 Psychobiology), 372–387. https://doi.org/10.1111/j.1749-6632.1997.tb48293.x
- Shaw, R. L., Booth, A., Sutton, A. J., Miller, T., Smith, J. A., Young, B., Jones, D. R., & Dixon-Woods, M. (2004). Finding qualitative research: an evaluation of search strategies. *BMC Medical Research Methodology*, *4*(1). https://doi.org/10.1186/1471-2288-4-5
- Sherwood, G. (1999). Meta-Synthesis: Merging Qualitative Studies to Develop Nursing Knowledge. *International Journal of Human Caring*, 3(1), 37–42. https://doi.org/10.20467/1091-5710.3.1.37
- Stemler, S. E. (2004). A Comparison of Consensus, Consistency, and Measurement Approaches to Estimating Interrater Reliability. *Practical Assessment, Research and Evaluation*, 9(4). https://doi.org/10.7275/96jp-xz07
- Sweeney, A., Fahmy, S., Nolan, F., Morant, N., Fox, Z., Lyoyd-Evans, B., Osborn, D., Burgess, E., Gilburt, H., McCabe, R., Slade, M., & Johnson, S. (2014). Correction: The Relationship between Therapeutic Alliance and Service User Satisfaction in Mental Health Inpatient Wards and Crisis House Alternatives: A Cross-Sectional Study. *PLoS ONE*, 9(10), e110097. https://doi.org/10.1371/journal.pone.0110097
- Tai-Seale, M., Sullivan, G., Cheney, A., Thomas, K., & Frosch, D. (2016). The Language of Engagement: "Aha!" Moments from Engaging Patients and Community Partners in Two Pilot Projects of the Patient-Centered Outcomes Research Institute. *The Permanente Journal*. https://doi.org/10.7812/tpp/15-123
- Thomas, V. J., & Bowie, S. L. (2016). Sense of Community: Is it a Protective Factor for Military Veterans? *Journal of Social Service Research*, 42(3), 313–331. https://doi.org/10.1080/01488376.2015.1109575
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

- Trivedi, R. B., Post, E. P., Sun, H., Pomerantz, A., Saxon, A. J., Piette, J. D., Maynard, C., Arnow, B., Curtis, I., Fihn, S. D., & Nelson, K. (2014). Prevalence, Comorbidity, and Prognosis of Mental Health Among US Veterans. *American Journal of Public Health*, 105(12), 2564–2569. https://doi.org/10.2105/ajph.2015.302836
- True, G., Rigg, K. K., & Butler, A. (2014). Understanding Barriers to Mental Health Care for Recent War Veterans Through Photovoice. *Qualitative Health Research*, *25*(10), 1443–1455. https://doi.org/10.1177/1049732314562894
- Westermeyer, J., Canive, J., Thuras, P., Chesness, D., & Thompson, J. (2002).

 Perceived Barriers to VA Mental Health Care Among Upper Midwest American Indian Veterans. *Medical Care*, 40(Supplement), I–62. https://doi.org/10.1097/00005650-200201001-00008
- Westin, A. M. L., Barksdale, C. L., & Stephan, S. H. (2014). The Effect of Waiting Time on Youth Engagement to Evidence Based Treatments. *Community Mental Health Journal*, *50*(2), 221–228. https://doi.org/10.1007/s10597-012-9585-z

Chapter 2: Empirical project

Title: An explorative study into the impact of the coronavirus pandemic on veterans' wellbeing

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Conflict of Interest: None

Funding: This research did not receive any grants from public, commercial or not for profit sector funding agencies.

Word count: 13,192 (excluding references, appendices)

Keywords: COVID 19, the coronavirus pandemic, wellbeing, military veterans'

Short running title: The impact of COVID 19 on veteran wellbeing (max of 40

characters)

*This systematic review has been prepared in accordance with the author guidelines of Journal of Clinical Psychology & Psychotherapy (see appendix 1)

<u>Abstract</u>

Background: Strict public health measures were put in place to reduce transmission rates of COVID-19. However, it is predicated these measures will have widespread consequences on the population's wellbeing, specifically for individuals with preexisting mental health conditions. Research has started the process of exploring these consequences within the general population; however, to date there is little known about these consequences within the veteran community. Therefore, this current project was designed to explore the impact of the coronavirus pandemic within the veteran population.

Methods: A qualitative methodology was utilised due to the explorative nature of the research question. Interpretative Phenomenological Analysis (IPA) was chosen to obtain a rich and detailed account of the experiences of veterans living through the pandemic. In total, 10 veterans consented to take part in the study.

Results: The study highlighted three key superordinate themes; (1) the benefits of a military mindset, (2) the negative impact on veteran wellbeing, (3) relationships.

Discussion: A summary of the above results are provided. In addition to this key clinical implications and ideas for further research are fully explored.

1.Introduction

1.1 Military veterans

Within the United Kingdom a military veteran is defined as any individual who has served for at least a day or more in HM Armed Forces, whether as a regular or reservist (Scottish Government, 2012). Many military and non-military factors contribute to the presence of mental health disorders within the veteran population (House of Commons Defence Committee, 2019; Oster et al., 2017). Therefore, it is difficult to determine the extent to which military service triggered an individual's mental health condition given the range of factors that might have contributed (House of Commons Defence Committee, 2019). Previous studies of prevalence found that from a sample of 4,461,208 veterans 13.5% met diagnostic criteria for depression, 9.3% for PTSD, 8.3% for substance use disorders and 4.8% for anxiety disorders (Trivedi et al., 2014).

More recent evidence found veterans reporting higher rates of both alcohol (5.4%) and substance use disorders (5.7%) in comparison to the general population (Williamson, et al., 2018). Furthermore, from the 1578 medical discharges that the Military of Defense (MoD) reported in 2020, it was estimated that 34% of these were due to mental health difficulties (Rhead et al., 2020).

1.2 The Coronavirus Pandemic

Research is beginning the process of understanding how the coronavirus pandemic has affected the wellbeing of the general population; however, little is known about the pandemics impact on military veterans (Purcell et al., 2021). The coronavirus pandemic, which has since been named COVID-19 by the World Health Organisation has been found in countries across the world. Most commonly, symptoms of the disease include a loss or change in taste and or smell, high temperature and a new and consistent cough. Given the worldwide presence of this disease, strict public health measures have been enforced to curtail the rates of infections (Adhikari et al., 2020). Although these measures were effective in reducing rates of transmission of the virus, it is expected that there will be widespread consequences for the worlds health and wellbeing as result of these measures (Douglas et al., 2020).

Previous outbreaks of infectious disease, like COVID 19 are commonly associated with significant levels of psychological distress and symptoms of mental illness (Bao, et al.,2020). Current evidence suggests COVID 19 has similar negative effects on wellbeing as seen with previous infectious diseases (Rajkumar, 2020). For example, increased rates of anxiety and depression across the general population (Wang et al., 2020; Salari et al., 2020; Hossain et al., 2020).

Throughout the pandemic it is predicted a greater prevalence of social isolation will exist, which will have a negative impact on mental wellbeing (Courtet et al., 2020). As

a concept, social isolation has associations with depression, negative emotions, suicidal thoughts and a risk of early mortality (Ge et al., 2017; Baumeister & Leary, 1995; Holt-Lunstad et al., 2010). The Temporal Need-Threat Model (Williams, 2009) suggests individuals who experience social isolation enter a stage of psychological resignation, which is characterised by feelings of depression, alienation, unworthiness and helplessness (Pancani et al., 2021).

1.3 Veteran wellbeing and the coronavirus pandemic

Research has highlighted a greater prevalence of social isolation within the general population during the pandemic (Hwang et al., 2020). Prior to the pandemic, the veteran population had rates of social isolation in excess of other non-military populations (Royal British Legion, 2014). Military culture promotes a sense of self-reliance and the avoidance of help seeking which can result in high rates of social isolation within military veterans (Stapleton, 2018). The consequences of which are significant, given social isolation within this population is associated with a range of mental health disorders and suicidal ideation (Wilson et al.,2018; Porter et al., 1997; Martin & Hartley, 2017).

Further to this, vulnerable populations, such as individuals with pre-existing mental health conditions are predicted to be at risk of further mental health difficulties during the pandemic (Yao et al., 2020). This prediction is consistent within the veteran population, whereby veterans with pre-existing mental health conditions are hypothesised to experience an increase in common mental health disorders (Murphy, et al., 2022). This in line with previous findings which documented a 33% increase in

veterans seeking mental health support during the initial period of the pandemic (Help for Heroes, 2020). Furthermore, veterans with previous combat or captivity trauma were found to be highly vulnerable to a deterioration in their mental health during the pandemic, specifically displaying higher rates of PTSD (Solomon et al., 2021). It is suggested, veterans pre-existing mental health disorders are maintained due to poor social connection experienced during the pandemic (Sippel et al., 2019).

As discussed, it is predicted veterans with pre-existing mental health conditions may suffer from further wellbeing consequences during the pandemic (Murphy et al., 2022). However, opposing predictions suggest veterans could cope better during the pandemic in comparison to the general population (Marini et al., 2020). There are many similarities between the pandemic and warzone conflict. For example, the enactment of the Defense Production Act; concerns about shortages of food and medical supplies; family separations; and a constant reference to mortality (Marini et al., 2020). Although undoubtedly a challenging time, military personnel demonstrate a readiness and resilience far in excess of the general population when confronted with conflict and stressful environments (Nindl et al., 2018).

Viewed as a skill, military resilience is believed to be present as a result of routinely performed habits, such as daily physical activity which is a key aspect of military life (Nindl et al., 2018). The successful performance of challenging physical tests of endurance, result not only in metabolic changes but develop psychological resilience (Hoyt et al., 2006). This psychological resilience is the mental process which can protect an individual from the negative effects associated with stressful events

(Fletcher & Sarkar, 2012). It is the most critical part of military readiness that allows the solider to perform well during military operations (Nindl et al., 2018).

For some veterans who have experienced active combat, adversity later on in life has been successfully managed (Elder & Clipp, 1989). Developing a set of learnt coping skills, self-discipline and an appreciation of life allowed them to overcome future non-military adversities (Elder & Clipp, 1989). More recent evidence found positive appraisals of military service provided protective effects on psychological health (Lee et al., 2017) and were associated with positive coping strategies (Jennings et al., 2006). It is possible that military veterans have learnt a myriad of coping skills (Marini et al., 2020), that if used could act as a protective factor for mental wellbeing throughout the pandemic.

1.4 Rationale and aims

To reduce the rates of transmission of the coronavirus, strict public health measures were put in place (Adhikari et al., 2020). Although these measures were effective in reducing the spread of the virus, the impact of these measures are likely to have significant consequences on the population's mental health (Douglas et al., 2020). Early findings have found an increase in social isolation within the population (Hwang et al., 2020); however, little is known about the pandemic's impact on the veteran population (Purcell et al., 2021). This is of concern to clinicians working within veteran services given rates of social isolation pre pandemic were already disproportionally

high across the veteran community (Royal British Legion, 2014; SSAFA, 2017). Furthermore, social isolation within the veteran population is associated with a range of mental health difficulties along with suicidal ideation (Wilson et al., 2018; Porter et al., 1997; Martin & Hartley, 2017). Thus, adding a greater rationale to explore social isolation further within a veteran sample.

Individuals with pre-existing mental health conditions are predicted to be at risk of further mental health difficulties during the pandemic (Yao et al., 2020). Similarly, veterans with pre-existing mental health conditions are also predicted to experience an increase in common mental health disorders (Murphy et al., 2022). However, contrasting predictions suggest veterans will cope better during the pandemic in comparison to the general population (Marini et al., 2020). Military personnel often demonstrate a readiness and resilience far in excess of the general population when confronted with conflict and stressful environments (Nindl et al., 2018). A resilience that has developed throughout military life (Nindl et al., 2018) and could be utilised during the pandemic given the similarities between warzone conflict and the pandemic (Marini et al., 2020).

Therefore, in light of the above the primary aim of this current study was to explore the impact of the coronavirus pandemic on the wellbeing of veterans who have previous mental health difficulties. In addition, the study had two further secondary aims which were: (a) to explore social isolation within a veteran sample during the pandemic, (b) to consider the impact of a previous military career on a veteran's ability to cope during the pandemic. Given the explorative nature of the study's primary aim a qualitative

methodology was deemed to be appropriate. Interpretative Phenomenological Analysis (IPA) was selected to analyse the obtained data given it is designed to explore and capture commonalties across the data set (Smith et al., 2009). Therefore, it is an appealing form of analysis when exploring the lived experience of individuals who have experienced the same phenomenon, such as the coronavirus pandemic.

2.Method

2.1 Design

This exploratory study used Interpretative Phenomenological Analysis (IPA) as its qualitative methodology. IPA suited the study's objective of exploring military veterans' experiences of living through the pandemic, given the methodology is designed to capture the lived experience of individuals who have encountered the same phenomenon. For example, the coronavirus pandemic. The successful use of IPA in previous military veteran research also recommended it as an appropriate methodology (Krause-Parello & Moralles, 2018).

2.2 Interpretative Phenomenological Analysis (IPA)

IPA was created by Jonathan A. Smith in 1996 as a new addition to the approaches designed to analyse qualitative data. At the centre of IPA is the methods direct committed to the examination of how people make sense of major life experiences

(Smith et al., 2009), such as the coronavirus pandemic. The theoretical foundations of IPA are extracted from three unique areas of philosophy, which include: phenomenology, hermeneutics and ideography. In its simplest form phenomenology relates to the study of experience. Specifically, it is the researcher's attempt to understand other people's relationships with the world, focusing on the individual's efforts to attribute meaning to their activities and to the things happening to them (Smith et al., 2009).

The second pillar of IPA is hermeneutics, which relates to the theory of interpretation of human experience. Hermeneutics is the process whereby the researcher is committed to make sense and meaning out of participants individual experience. The The researcher will be engaged in a double hermeneutic whereby they have to make sense of the participant making sense of their own experience, with the intention to acquire a meaningful perspective into the participant's lived experience of a specific phenomenon. Central to this second pillar is what is known as the hermeneutic circle, which refers to the dynamic relationship between the part and the whole, at a series of levels (Smith et al., 2009). To acquire a global understanding, attention must be focused on both the whole, and the parts. For example, the meaning of the word only becomes clear when seen in the context of the whole sentence; however, at the same time, the meaning of the sentence depends upon the cumulative meanings of the individual words (Smith et al., 2009). Although IPA has an agreed set of analytical steps the hermeneutic circle provides a useful reminder that the researcher can go back and forth between each step if needed (Smith et al., 2009). In doing so highlighting the iterative nature of IPA.

The last theoretical foundation of IPA is idiography, which refers to specifics of the individual's experience. IPA has an overarching sense of commitment to the detail of the experience, along with a desire to ensure these experiences have been understood from the perspectives of the particular person, in a particular context (Smith et al., 2009). Uniquely, this approach is in opposition to the majority of analytical methods within psychology, whereby there is focus for the results to be generalisable to a group or population.

To conclude, IPA was deemed an appropriate qualitative methodology given its ability to collect in-depth and exploratory personal experiences of the group (Barker et al., 2015). Therefore, allowing the research to capture veterans' experiences of living through the coronavirus pandemic. Providing the researcher with the opportunity to explore how each veteran made sense of their experience. The iterative nature of IPA encouraged unanticipated findings to emerge contributing to the understanding of the phenomenon explored (Barker et al., 2015). Furthermore, IPA is favoured over additional methodologies when the topic in question is emotionally laden given the painstaking attention it gives to enabling the participant to recount a full account as possible of their experience (Smith & Osborn, 2015). Therefore, providing a further rationale for its inclusion within this current study due to emotion associated with loss endured during the pandemic.

Alternative methodologies were considered, such as grounded theory; however, the current project does not aim to conceptualise a theory therefore this approach was not chosen. Similarly, thematic analysis was not chosen given this approach is likely to ignore personal experiences due to its ambition to identify patterns of meaning. Unlike

in IPA whereby there is a greater focus on the lived experience of the participant whilst also identifying patterns of meaning. IPA focuses on the analysis of each case before developing themes across cases. Unlike in thematic analysis where themes are generated across cases from codes, following the coding of the entire data set (Braun & Clarke, 2020). It was IPA's ability to conduct a deeper analytical exploration of each individual case prior to the development of themes which added a greater rationale for its inclusion in this current study. Furthermore, thematic analysis will commonly work with larger sample sizes which this current project was not able to do so given the limited access to participants and time constraints placed on the researcher.

Due to the importance IPA places on the dynamic relationship between the participant and interviewer certain prejudices or biases can affect this relationship and the interpretation of the results. For example, the impact of the researcher being a white male from the North East of England and from an age demographic that is different from the recruited participants. In addition, there is likely to be a higher probability for demand characteristics given the interviewer is also a trainee clinical psychologist working within the veteran service from which participants are being recruited from.

2.3 Participants

Recruitment

Participants were recruited from Veterans First Point, Lothian (V1P, Lothian). The service is located within NHS Lothian and is accessed by veterans who reside within Edinburgh and the surrounding Lothians. V1P, Lothian has a strong track record for providing both psychological and welfare support for military veterans who have served within HM Armed Forces. Initially, this service was approached to discuss whether or not it was feasible to recruit participants from the service. From the outset V1P, Lothian was confident that the researcher would be able recruit enough participants that would facilitate the completion of IPA. After these discussions the researcher attended the service to provide a presentation to the team highlighting the project's rationale and recruitment steps (see figure 1).

Figure 1. A flow chart illustrating the specific recruitment steps

Researcher provided clinicians with copies of the participant information sheet (see appendix 4) and consent forms (see appendix 5) Clinicians reviewed their caseload to identify prospective participants in line with the studies inclusion and exclusion criteria Prospective participants were provided with participant information sheet and consent forms by their clinician. Also providing verbal consent to their clinician for the researcher to contact them via telephone An initial telephone call was conducted between the prospective participant and researcher to answer any questions they had surrounding the study If prospective participants wanted to take part in the study they completed the consent form and returned it to V1P, Lothian On receiving the completed consent form, the participant was then provided with a date for the telephone interview to be completed

Study recruitment formally commenced in September 2021 and ended in December 2021 upon reaching the maximum number of consented participants (N=10).

Sample

A sample of 10 military veterans were recruited from V1P, Lothian to participate in the study. This is in line with previous suggestions that stipulate IPA projects should recruit between 4-10 participants (Smith et al., 2009). For the purpose of clarity within the United Kingdom a military veteran is defined as any individual who has served for at least a day or more in HM Armed Forces, whether as a regular or a reservist.

Inclusion and exclusion criteria

For participants to be included in the study they had to meet the following criteria: (1) a military veteran, (2) aged 18 and above, (3) registered with V1P, Lothian, (4) currently engaged in therapy or on the team's psychological waitlist and (5) have a mental health diagnosis. Prospective participants were excluded if they met any of the following criteria: (1) have a confirmed learning disability or neurological impairment, (2) display significantly high levels of suicidal ideation whereby their safety is a primary aim for the clinician and (3) are at a point within therapy whereby engagement in the research project would have negative impact on therapy outcomes. Clinicians at V1P, Lothian assessed whether or not engagement in the research project would have a negative impact on therapy outcomes. If they had concerns, participant information forms were not provided to the prospective participant.

2.4 Procedure & data collection

The clinical team at V1P, Lothian were pivotal during the initial period of recruitment. Clinicians played a key role in identifying prospective participants and supported the researcher throughout the consent process. After consent was gained the participant was provided with an appointment letter containing the date and time for when the semi-structured telephone interview would take place. If the allocated date and or time was not suitable, the participant was able to contact the researcher via email or telephone to arrange a more convenient time for the interview to take place.

Given there was often a delay between obtaining written consent and the interview taking place, the researcher ensured verbal consent was gained prior to the interview starting. During this process each participant was reminded of the right to withdraw from the project without any future repercussions on their clinical treatment. Each semi-structured interview was completed via telephone. The researcher was based at V1P, Lothian and conducted all telephone interviews from this base. This was to ensure the researcher had clinical support in the event crisis support was deemed appropriate upon completion of the telephone interview. After completion of the telephone interview all participants were debriefed. No additional demographic data was obtained from each participant given this was not an aim for this current study. Therefore, it was deemed unethical to collect such data if no further analysis was to be undertaken utisling this demographic data.

Ethical approval for this procedure and project in its entirety was approved by Yorkshire & The Humber – Sheffield Research Ethics Committee (See appendix 11).

Local NHS research and development approval was granted by NHS Lothian (see appendix 12). Caldicott approval was gained prior to the study commencing (see appendix 13). The University of Edinburgh's School of Health in Social Sciences Research Ethics Committee also confirmed registration of this study (see appendix 14).

2.5 Semi-structured interview schedule

Data was obtained via the implementation of semi-structured interviews that took place over the telephone. A series of questions were created that enabled the researcher to capture the lived experiences of military veterans that lived through the coronavirus pandemic (see table 1). During the development of these questions careful consideration was taken to ensure that the style of question was varied throughout the interview schedule. Which is line with previous suggestions regarding this topic (Smith et al., 2009). In addition, the researcher ensured that each interview question where possible, was primarily linked to the projects research aims. The finalised interview schedule comprised of 8 questions which included prompts in order to encourage participants to expand on their original answer if needed.

2.6 Pilot interview

In line with previous research (Kezar, 2000; Smith et al., 2009) a pilot interview was conducted to trial the effectiveness of the interview schedule. Given that semi-structured interviewing represented the only form of data collection, piloting work assessing the feasibility of the proposed interview schedule is strongly recommend within IPA (Guihen, 2020). Following the pilot interview, it was felt that the interview

schedule was able to obtain both rich and detailed data regarding the participants' experiences of living throughout the pandemic. Therefore, no changes were made to the interview schedule. The pilot interview transcript was included in the final analysis.

Table 1. Semi-structured interview questions

Interview questions

1. Could you tell me about your experience of living through the Coronavirus Pandemic?

Prompts: How did you manage? How was this experience for you?

2. Did you notice any changes in your overall wellbeing during Coronavirus Pandemic? If so what changes did you notice?

Prompts: Why do you think the changes occurred? When did you notice these changes?

3. Did you notice any changes in feelings of social isolation or loneliness during the Pandemic? If so what changes did you notice?

Prompts: Did you feel isolated? Do you think this had an impact on your wellbeing?

4. Did the Coronavirus Pandemic impact your physical or mental health or both?

Prompts: In what way did it impact you? Did anything help?

5. Do think having a military background helped or hindered your own wellbeing throughout the Coronavirus Pandemic?

Prompts: In what way did it help? Did it make things worse?

6. If you didn't note any changes in your wellbeing during the Coronavirus Pandemic, what do you think made the difference?

Prompts: What was key in this process for you? What helped?

7. What coping skills do you think other veterans would consider as important strategies that may have helped wellbeing during the pandemic?

Prompts: Any skills specific to the military?

8. Has living through the Coronavirus Pandemic changed anything about your life now?

Prompts: Has it changed any relationships with your family or friends?

2.7 Interviews

All 10 participants were interviewed utilising the interview schedule noted in table 2. Prior to the interview commencing time was spent conversing with the participant to build rapport which is an imperative part of the interview process to obtain good data (Smith et al., 2009). During this process it was reiterated to the participant that there is no right or wrong answer to the question asked, encouraging each participant to provide honest reflections. The length of time spent building this rapport varied for each participant; however, the main body of the interview only commenced when the researcher was confident that a rapport had been established with the participant.

The completed interviews lasted from 29 – 51 minutes with a mean time of 37 minutes. Each interview was digitally recorded to enable transcription and subsequent analysis. Upon completion of the interview participants were debriefed (see appendix 6). During which participants were provided with a space to discuss any difficult emotions that may have come up for them during the interview. Given the nature of the project the researcher was keen to provide an opportunity for discussion to promote containment and to risk assess the need for crisis support if warranted. The researcher can confirm no participant required referral to crisis support services. In addition, during the debrief process participants were also asked if they would like to be provided with a short summary of the results upon completion of the project.

2.8 Data transcription

All interviews were audio recorded to allow for transcription. Once each interview was transcribed the recording was deleted. In agreement with ethical approval, all identifiable information was removed from each transcription, such as the participant's name. Each participant's name was replaced by a number to uphold confidentiality. In addition, participant consent forms were stored in a separate locked filling cabinet from transcribed data to protect the identity of the participants. Similarly, the audio recording device was also stored in a separate locked filling cabinet which did not include personal information. All filing cabinets were stored at an NHS site (V1P, Lothian).

2.9 Data analysis

To ensure the researcher engaged with the obtained material they personally transcribed each of the recorded interviews. Upon completing all ten transcriptions, the data was then analysed via IPA following the process described by Smith et al. (2009). In total, Smith et al. (2009) suggested researchers that are conducting IPA should adhere to the following 6 steps: (1) reading and re-reading transcripts, (2) initial noting, (3) developing emergent themes, (4) searching for connections across emergent themes, (5) moving to the next case and (6) looking for patterns across cases. See table 2 for a visual representation of each step of IPA.

Table 2. The six steps of IPA (Smith et al., 2009)

Six steps of IPA

Step 1: reading and re-reading transcripts

Step 2: initial noting

Step 3: developing emergent themes

Step 4: searching for connections across emergent themes

Step 5: moving to the next case

Step 6: looking for patterns across cases

Step 1: Reading and re-reading transcripts

During the first step the researcher aimed to immerse themselves into each transcript in line with the suggestions of Smith et al. (2009). Initially, this was done by listening to the audio recording during the first read through of the transcript. The transcript was then read and re-read multiple times until the researcher was confident that the participant had become the focus of the analysis (Smith et al., 2009). During this process the researcher was cautious not to fall into the habitual trap of reducing or summarising read material. To avoid this the researcher noted down initial observations about each transcript in a separate notepad to promote active engagement with the material.

Step 2: Initial noting

Building upon the process set out in step 1, this second step allowed the researcher to examine the semantic content and language use on a very exploratory level (Smith et al., 2009). The researcher began by noting down anything of interest that was present with the transcript. In doing so increasing their knowledge of how the participant talked about, reflected on and related to the coronavirus pandemic. In line with previous guidelines, (Smith et al., 2009) this process of initial note taking was broken down into three discrete processes with different focuses: (1) descriptive comments, (2) linguistic comments, and (3) conceptual comments. Where possible the researcher adhered to this process throughout the entirety of the note taking procedure. Appendix 7 contains a sample of annotated transcript illustrating the process of initial note taking through to the development of emergent themes. In doing so illustrating the process behind step 2 and 3 of IPA. As suggested by Smith et al., (2009) a coding grid was used to facilitate this process.

Step 3: Developing emergent themes

The focus of this current phase of IPA encourages the researcher to begin the process of developing emergent themes within the transcript. In looking for emergent themes, the researcher was driven to reduce the volume of detail (the transcript and the initial notes) whilst maintaining complexity, in terms of mapping interrelationships, connections and patterns between exploratory notes (Smith et al., 2009). During this step, the researcher's focus shifted from the transcript towards the initial notes that had been made. Throughout the process of developing emergent themes the

researcher was acutely aware for the need for themes to be concise, capturing the psychological meaning attached to each piece of data.

Step 4: searching for connections across emergent themes

Upon identification of the emergent themes the researcher then spent time looking for connections between them in order to identify patterns of similarity. In line with previous suggestions (Smith et al., 2009) visual mapping skills were utilised. Firstly, emergent themes were ranked in chronological order. After which themes were then printed out onto individual pieces of paper and moved around to form clusters of related themes (See appendix 8).

Step 5: Moving to the next case

Step 5 of the process of IPA prompted the researcher to repeat steps 1 to 4 on the next transcript. The researcher adhered to the steps mentioned above to ensure new themes and super-ordinate themes occurred organically without being influenced by the previous transcript. This process was then repeated on each remaining transcript.

Step 6: Looking for patterns across the cases

This final step of IPA required the researcher to search for patterns across the transcripts. Clustered themes from each transcript were then placed onto a large table whereby the researcher could visually search for shared patterns to correctly identify

and label superordinate themes. The process involved the researcher moving the themes around on the table until the identification of the superordinate themes. Keeping in mind some of the key questions proposed by Smith et al. (2009) during this process. Such as, what connections are there across cases? And which themes are the most potent? Which in some cases lead to the reconfiguration, relabelling and the removal of emergent themes due to a lack of shared identity across transcripts. See appendix 9 for a visual illustration in support of this process.

2.9.1 Quality assurance

Traditionally, criteria normally assigned to quantitative projects, such as the inclusion of a representative sample and reliable measures are not applicable to qualitative designs (Yardley, 2000). However, it is still important to consider the concept of validity when implementing qualitative research. With this in mind, the researcher adopted the quality framework tool for qualitative research proposed by Yardley (2000). The framework itself comprises of four key factors which act as markers of validity and indicators for good qualitative research: (1) sensitivity to context, (2) commitment and rigour, (3) transparency and importance and (4) impact and coherence. Each factor of the framework was considered throughout the research process. Each factor within the framework was specifically reflected upon in the context of IPA utilising the guidance proposed by Smith et al., (2009). For example, clearly describing each process of IPA during the write up to ensure transparency.

In addition to the above, the researcher's academic supervisor was also recruited to read over the project's findings in order to add further measures of validity. Finally, a reflective diary was kept by the researcher throughout the research process to establish further credibility and to identify factors that may have influenced data analysis (Smith et al., 2009). The diary allowed the researcher to reflect on their own experiences of conducting the interviews and data analysis. Providing the researcher with the opportunity to reflect upon any prior assumptions that were noted. For example, prior to conducting participant interviews the researcher assumed veterans would highlight the negative impact of the pandemic on wellbeing. Throughout the design phase of the research project, the researcher was conducting clinical therapy within this population. Within clinical therapy the negative impact of the pandemic on wellbeing was a key repetitive source of discussion. Therefore, it was assumed similar discussions would be present within the interviews. See appendix 10 for reflective diary excerpts containing prior assumptions and more wider reflections upon the process of IPA.

3.Results

In total, three superordinate themes were identified from the analysis: the benefits of a military mindset, the impact on wellbeing and relationships. As table 3 shows each superordinate theme includes a series of subthemes which were evident across the transcripts. For an author to confirm the presence of a superordinate theme it is recommended (Smith et al., 2011) that there are transcripts from at least three participants in support of the theme. This recommendation was adhered to within this

current IPA based study. See table 3 for the full list of superordinate themes and subthemes along with their prevalence across the data set.

Table 3. Included superordinate and subthemes

Superordinate theme	Subtheme	Prevalence	Participants supporting transcript
The benefits of a military mindset	1. Highly resilient	5/10	P3, P4, P5, P9, P10
The benefits of a mintary minuset	2. Reflections from a warzone	5/10	P1, P2, P4, P9, P10
	3. Effective use of routine	4/10	P1, P3, P5, P10
	4. A military preference for exercise	4/10	P4, P6, P7, P10
	5. The ability to plan	5/10	P1, P2, P4, P8, P10
The negative impact on veteran wellbeing	1. Anxiety 2. Depression 3. Social Isolation	5/10 6/10 9/10	P4, P5, P6, P7,P8 P1,P4, P6, P8, P9, P10, P1, P3, P4, P5, P6, P7, P8, P9, P10
Relationships	Concern for family members	5/10	P5, P6, P8, P9, P10
	2. The negative impact of others	4/10	P2, P3, P4, P7

3.1 Superordinate theme 1: The benefits of a military mindset

This superordinate theme acknowledges the notion of a military mindset. This mindset

was considered to be a beneficial tool that veterans utilised throughout the covid

pandemic. A mindset that was developed within the military via unique experiences

and training. Each specific subtheme mentioned below refers to a specific area of the

military mindset.

Subtheme 1: Highly resilient

This subtheme recognises the strengths of a resilient mindset. There was a clear

indication that resilience was seen as a positive factor throughout the pandemic. This

is seen in the following extract, whereby participant 3 speaks to this notion of

resilience:

"Interviewer: So, was there any military skills that come to mind that have been

helpful during the pandemic?

P3: I think having a military background teaches you to be absolutely resilient,

because you are conditioned to endure physically and mentally, that's what it

does for you, and that's a huge bonus because you are two steps forward than

everybody else in every walk of life and career as far as im concerned"

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Furthermore, participant 3 refers to the idea that resilience is a unique skill that separates the veteran community from other non-military careers. A psychological skill that encourages continuation despite experiencing discomfort:

"My view, as a solider, that skill set that you get, that resilience means that it doesn't really matter how long it goes on for, you know...because you can still endure, coz you know it will pass, you will eventually get there. You know a lot of people don't have that, you can see people start to crumble under the stress and pressure...and those skill sets came to the fore for me..." (P3)

As shown in the above extract, it is evident that the participant's resilient mindset was utilised during the pandemic. Using resilience in a positive way when others started "to crumble under the stress and pressure" (P3). The idea that resilience encouraged continuation despite suffering hardship during the pandemic is further mentioned by participant 4:

"...and that's how I was going to get through this, I knew I was going to be there at the finishing line...I refused to give up, and that's the training from the army that teaches you that, you never give up" (P4)

This ability to never give up, which is a key characteristic of a resilient mindset was noted to be a result of military training. Further characteristics associated

with resilience was discussed by participant 9. Similarly, participant 9 also highlighted military training as the key factor that developed resilience:

"It taught me (military background) just to survive it (pandemic), and there is big difference between living a day and surviving a day. So I would say I was in survival mode, having a military background taught me that, to survive" (P9)

Subtheme 2: Reflections from a warzone

This subtheme relates to the veterans' reflections and experiences of operational tours of duty. Veterans within this study shared many examples of the challenges faced during operational tours. Experiences of being on tour provided a point of comparison during the pandemic which was viewed as a positive:

"Interviewer: Do think having a military background helped or hindered your own wellbeing throughout the Coronavirus Pandemic?

P9: ehh... I think it helped. Like I have been in some dodgy situations in Afghan where it was like 50:50 and I just thought like...because you've already been in situations where you are like... I don't think I could be in a worse situation like when I was faced with the Taliban and that" (P9)

Participant 9 refers to a tour of Afghanistan whereby there were a significant threat to life. Although challenging, these experiences were stated to have "helped" them cope during the pandemic. This comparative reflection between warzone conflict and the pandemic was seen in further extracts:

"People have been in a warzone you know...So the pandemic would be a walk in the park for people that served in Iraq, Afghan or even the Gulf war" (P2)

"I had been deployed to Afghanistan 4 times. So I had been out in the sticks, in the middle of the desert and I had next to nothing for weeks on end so I knew I was going to grind this out somehow" (P4)

"Aye...see like they (civilians) will sit an whinge about locking this down and locking that down and sit and moan about it and we would put things up on Facebook, and one of the guys would put a picture up of us back in Irag and Afgan with 100lbs of kit and you've just come in off a tab (military exercise). So you know, it's a different mentality" (P1)

The above extracts appear to relate to the idea of confidence. A confidence that installed a belief within veterans that they could overcome the difficulties associated with the coronavirus pandemic. This confidence is developed from previous difficult and challenging experiences within warzones. There is a feeling that the difficulties that have been proposed by the pandemic are not equivalent to the experiences endured within warzones. Providing veterans with a personal reference point in terms of distress which is not comparable to the experiences faced by populations during the pandemic. Therefore, as

participant 4 stated they knew they were "going to grind this out somehow" based on previous experiences of warzone conflict.

Subtheme 3: Effective use of routine

Subtheme 3 acknowledges the effective use of adhering to a routine. There is a strong belief that adhering to a routine was a helpful trait to utilise throughout the pandemic. Participant 3 suggested the ability to utilise routine was a "typical military trait":

"Interviewer: What coping skills do you think other veterans would consider as important strategies that may have helped your own wellbeing?

P3: Yeah I think the biggest one is routine. Trying to create a routine that you can trust and rely on, on a daily basis... that's what you do. You feed your kids or whatever it is that you do and you've got a routine that you get into. You got meetings, you've got structure, communications, phone calls to make to get yourself into a routine, and that's a typical military trait"

Furthermore participant 1 talked at length about how this preference for routine had become automatic given the length of service within the military:

"Aye...aye, so you've got traits that are instilled in your for 14 years . So like 9 times out of ten, getting up, having a shave, or a shower you do it

without even thinking. So 9 times out of 10 I was rigid with timings which helped" (P1)

Participant 5 provided further reflections regarding the importance of routine. Routine was often used during times of difficulty. Although it was acknowledged that routine was often hard to maintain, it provided 'something to fall back on' during difficult times. Furthermore, in agreement with the above participant 5 acknowledged how this preference for routine was a result of a military career:

"Interviewer: So, the routine you mentioned, was that a skill you learnt throughout the military or were you like that before joining the military?

P5: Nah that was definitely a skill a learnt through the military, organisation, routine. A mean the routine was difficult to maintain and there was many times when it all went to sh*t, but at the lowest points it was always something to fall back on...right lets pick myself up get back to it. It's that routine, when you were in you had a timetable to follow, and even when you are out a lot of the guys have still got that built into them"

Subtheme 4: A military preference for exercise

This subtheme explicitly relates to the benefits veterans acquired from participating in exercise. Physical fitness and exercise has a constant presence throughout an individual's military career. Recruits learn about the relationship between an individual's physical and mental health. This relational knowledge was evident in the below extract, along with highlighting the positive impact exercise had on their ability to cope throughout the pandemic:

"...obviously fitness, keeping yourself physically fit was key, because the fitter you are the more mental strength you have, and the more mental stress you can take. So when I doing fitness I knew this was having a major impact ... "(P4)

The above extract refers to the protective elements exercise had on the veteran's ability to deal with mental stress. Suggesting a greater level of physical fitness enabled them to endure further psychological stress. Participant 10 also commented on the positive impact of exercise on wellbeing during the pandemic:

"Fitness is a classic one, I think yeah it's good to get those chemicals going" (P10)

Participants made reference to the idea that the positive impact of engaging in exercise is a typical military trait. This is evident in the below extract:

"P6: a lot of them (veterans) it's the fitness thing, like im (age) so I'm not as fit, I can still do a bit but not a lot, but we have walking groups that I've joined that I will go when I can.

Interviewer: Do you think that sort of preference for fitness comes from your military days?

P6: yeah, definitely.... it has got to be the military"

Irrespective of increasing age, participant 6 still displayed a dedication to participate in some level of exercise and is certain that this preference for exercise is due to a previous military career:

Subtheme 5: The ability to plan

Subtheme 5 highlights the successful ability to plan during the pandemic. This ability to plan was seen as a positive trait that appeared to be developed during military training and or experiences. Furthermore, it allowed the veteran to continue to function throughout the lockdown period as shown below:

"I was mentally preparing myself for another lockdown. So I would say...I was going to say reading the battle picture and it's not the battle picture but I think you know what I mean. It's planning ahead and looking ahead to the situation so an example would be.... I would get medication earlier than I normally would, I would get some extra shopping than I normally would because I could see what was about to happen, I think that helped" (P4)

Participant 4 refers to this ability to plan as "reading the battle picture", thus having parallels with previous military experience. Their ability to plan ahead enabled them to purchase the essential items they needed in order to function throughout the lockdown period. Similarly, participant 8 also demonstrated the positive impact planning had on adaptive functioning during the pandemic:

"P8: planning, you know, when it was kicking off I didn't do a panic shop, a made sure my cupboards and freezer was fully stocked a wasn't one of those people that bought 18 rolls of toilet roll. I bought what was needed, so food and juice were important items

Interviewer: interestingly, you highlight your ability to plan as a skill you used, do you think you wouldn't have planned so well if you hadn't have served in the military?

PI: I think I would have been one of the panic buyers, I think a lot of people got swept up in that mob, and probably I would have been swept up too"

Upon reflection participant 8 suggested previous military experiences enabled them to successfully put in place an effective plan. Without these experiences participant 8 suggested they might have been panic buying supplies.

3.2 Superordinate theme 2: The negative impact on veteran wellbeing

The following superordinate theme makes reference to the reported consequences of the pandemic on the wellbeing of veterans with pre-existing mental health conditions. All subthemes within this superordinate theme encapsulate an area of veteran wellbeing that was noted to suffer whilst living through the coronavirus pandemic.

Subtheme 1: Anxiety

This first subtheme relates to the increased rates of anxiety during the pandemic that had been noticed by veterans included within this study. The impact of these increased rates of anxiety were visible in anxious cognitions, physical manifestations within the body along with an inability to tolerate uncertainty. All key features of generalised anxiety disorder. There was real sense of just how difficult this anxiety had been for participant 6 as noted below:

"....as said I was preparing my own funeral, you know for myself, even my wife.... doing a funeral plan because a didn't want......coz I seen these things on Facebook saying can you help such and such pay for a funeral so I didn't want my family to have to do that. So yeah I was very anxious...." (P6)

As shown above participant 6 reported cognitions of an anxious nature resulting in a change in behavioural patterns. This change in behaviour occurred during the pandemic as opposed to before the pandemic commenced and was influenced by what was visible on social media. This explicit worry was linked to a fear of death and the resulting financial consequences placed onto their family. Further presentations associated with anxiety were also reported by participant 7 who reported difficulties in tolerating uncertainty throughout the pandemic:

"So the mental side of it as well...not knowing basically when it's going to end, how long are we actually going to be locked up for and actually getting back to normal life type of thing" (P7)

In some cases, as restrictive measures were introduced anxiety was reported to rise resulting in the experience of panic attacks of a distressing nature as reported below:

"As more and more restrictions came in I felt more and more anxious...
the anxiety manifested itself in panic attacks, I mean full blown panic
attacks. You know the heart thumping, not being able to breath. Feeling
like you are going to have a heart attack. Ive had them before, but I found
them more difficult to manage this time" (P8)

It is evident that participant 8 was finding it challenging to manage their panic attacks. Although they suffered from panic attacks previously, participant 8 found them more difficult to manage throughout the pandemic. Suggesting a deterioration in pre-existing symptoms. This increase in anxiety was having a clear negative impact on wellbeing. Similar experiences were also reported by other participants:

"yeah...I was more anxious, I was bit apprehensive what I was going to do..." (P4)

"A felt more anxiety...it came in waves...ehhh it was just very very hard"
(P9)

Both participants further speak to this finding that highlights not only increased rates of anxiety but just how difficult it was to manage when participant 9 states "it was just very very hard".

Subtheme 2: Depression

This current subtheme focused upon veterans' self-reported feelings of depression. Many veterans within the study expressed a worsening of mood, in the process displaying clear depressive symptomatology. For some veterans, depression was associated with suicidal ideation. Furthermore, the pandemic accelerated the presence of depression far quicker than had been experienced before as participant 8 noted:

"it (pandemic) accelerated it, it made it (depression) manifest a hell of a lot quicker. You know for my depression to get bad it normally takes quite a while and im normally lucky enough to catch it but this time...I couldn't. I felt it coming on, and with everything going on with the pandemic it just exacerbated things for me and made my depression manifest a hell of a lot quicker and a lot worse" (P8).

For participant 8, not only did the pandemic accelerate their depressive mood they were also of the opinion that it made it "a lot worse". Participant 6 also made reference to a worsening of mood during the pandemic:

"I don't know, just low points, just a lot of low points during it (pandemic)..." (P6)

Furthermore, participant 4 expressed a number of depressive symptomatology that was present throughout the pandemic:

"My mental health deteriorated quite badly, I was getting quite angry and very irritated... my motivation just dipped, I wasn't sleeping properly, I wasn't eating properly, I wasn't functioning properly I would say" (P4)

For some veterans within the study feelings of depression were associated with an increase in suicidal ideation throughout the pandemic:

"P9: I was just having freak outs. It just got to point where it was affecting me (Pandemic). I had a point in April that I had been really bad and that's when I reengaged with the service, I don't know I just wanted to f**king do myself in really to be fair at that point, I don't know if it was all the stress that was going on or just...

Interviewer: so, do you think the pandemic played a significant part in promoting your feelings of suicide?

P9: oh aye, definitely a generally I think it really just spun my head"

"There was some really horrible times... that I was literally hanging my thread and it was only the phone calls that I was having here that kept me... suicidal thoughts had went through the roof" (P10)

"P8: when everything was going on with the pandemic the thoughts of self-harming really really come to the fore for me, and you know it wasn't just a case of wanting to kill myself, it was me wanting to kill myself in a painful way.

Interviewer: and was that a new thought process you were encountering regarding your suicidal ideation during the pandemic?

P8: yeah definitely, because before they had all been medication related, just take my medication and hopefully just fall asleep and I know that 9 times out of 10 that's not the case, but this time I was thinking about doing it in a painful way"

As illustrated the veterans mentioned above reported an increase in rates of suicidal ideation during the pandemic. Although causality cannot be confirmed given the qualitative nature of the project, veterans within this study reported the pandemic played a role in their experience of suicidal ideation. For participant 8 not only did the pandemic appear to trigger thoughts of suicide they noticed that there was change in thought process. Previously the intent centred upon an overdose; however, now they wanted to pursue a more "painful way".

Subtheme 3: Social isolation

The final subtheme comments on the feelings of isolation that veterans endured throughout the pandemic. This subtheme was the most prevalent across the dataset with 9 out of the 10 veterans disclosing feelings of isolation during the

pandemic. As participant 8 reported there was real sense of feeling isolated from their immediate family:

"Interviewer: did you notice any changes in feelings of social isolation or loneliness during the Pandemic? If so, what changes did you notice?

P8: yeah, I felt more isolated from my family and my children coz of the restrictions in place"

This feeling of being isolated from their immediate family was also referenced to by participant 7:

"I felt isolated and lonely, because you weren't able to interact with the family and that, it was all done over phone....and if you wanted to interact all the family were just standing on the doorstep" (P7)

Despite making connections with their family via the telephone and in line with social distancing measures participant 7 still reported feeling isolated. This feeling of isolation from their family was also reported by participant 6:

"It was lonely, okay we had a wee laugh on facetime and stuff but it's no the same as when we saw each other in person" (P6)

For participant 6 the pandemic was "lonely", video conferencing platforms were not equivalent to in person meetings. For certain veterans, such as participant 3 their own feelings of isolation prompted behavioural patterns that were not typical for that individual:

"So I found myself extremely isolated, there is only my wife and my little boy. So it had such a strange effect on me, so I was cutting my own hair. I was running out buying maize, dried eggs, dried milk and food coz we had no idea how long this would last so it was a feeling of total isolation for me with no end in sight" (P3)

As noted in table 4, social isolation was prevalent in 9 out to the 10 transcripts. Thus, highlighting the shared experience of social isolation across veterans within this study. For participant 9 the impact of social isolation was significant:

"I feel more isolated and lonely now that I have probably ever felt in my life, I feel more and more isolated as it goes on" (P9)

Finally, for some veterans, such as participant 5 the feeling of isolation had left them questioning if they were able to cope throughout the pandemic:

"Yeah, im trying to think of buzzwords and adjectives to describe it but it's hard, it might sound a bit overdramatic with the words im thinking in my head, but despair, complete isolation, loneliness, you know im going to have to deal with everything on my own and how am I going to cope" (P5)

3.3 Superordinate theme 3: Relationships

The final superordinate theme is titled relationships. This theme specifically captures the impact of relationships throughout the pandemic. These relationships not only encompass family members but also other individuals that the veteran was in relation to, i.e., neighbours, friends. This superordinate captures the concerns for close family members during the pandemic as well as the negative impact of others on veteran wellbeing.

Subtheme 1: Concerns for family members

This subtheme theme relates to the concerns veterans had towards family members during the pandemic. The primary concern related to the welfare of others as participant 6 disclosed:

"Total fear for the family, because my sister isn't very well so I was concerned she would get it (covid -19) and not get her operation" (P6)

As participant 6 disclosed there was a significant concern for their sister. This concern focused on contracting COVID 19 and the subsequent implications this could have on her planned surgeries. This concern regarding close relations contracting the virus was also reported by participant 5:

"The few people (Mother and father) I do see they are all quite old so I was a bit scared about seeing them in case I passed it on...." (P5)

Further to this, participant 8 was cautious not to burden his mother with his own concerns regarding his wellbeing during the pandemic. There was a sense of acknowledgement of his own mother's difficulties thus not wanting to add to these with his own difficulties:

"Yeah, you know when you are feeling that low, I don't want to burden her with that, my mum has serious issues as it is I don't want to add to that either, you know so I bottled that up" (P8)

Subtheme 2: The negative impact of others

This theme illustrated the negative impact of the behaviour of others on veteran wellbeing. The disregard of governmental rules during the pandemic by others was a source of frustration. As participant 4 reported his own mental health was deteriorating as a result of the behaviour of others:

"P4: Well I live in a block of flats and it hasn't been great and I'll tell you why... because people were treating it like a holiday, people were not adhering to the government guidelines or restrictions and were making my life a misery.

Interviewer: So what were they doing?

P4: partying, drinking and just taking the p**s.

Interviewer: so how did that impact your wellbeing?

P4: My mental health deteriorated quite badly, I was getting quite angry and very irritated with these people"

Further to this, participant 2 described how the pressure of others was having a negative impact on his wellbeing. Being encouraged to participate in activities that they did not want to do:

"So I was having peer pressure to... people were asking what was wrong and I was being encouraged to go drinking and stuff which I didn't want to do" (P2).

4.Discussion

The primary aim of this current study was to explore the impact of the coronavirus pandemic on the wellbeing of veterans who had previous mental health difficulties. In addition, two further secondary aims were also explored:

a) to explore social isolation within a veteran sample during the pandemic, (b) to consider the impact of a previous military career on a veteran's ability to cope during the pandemic. IPA represented the qualitative methodology for this project, enabling the author to obtain an in depth understanding into veterans' experiences of living through the pandemic. Resulting in the identification of three superordinate themes: the benefit of a military mindset, the impact on wellbeing and relationships.

4.1 Key findings

Superordinate theme 1: the benefits of a military mindset

Many veterans acknowledged the benefits of having a military mindset during the pandemic. This mindset comprised of five key areas which represented further subthemes within this current superordinate theme (highly resilient: reflections from a warzone: effective use of routine: a military preference for exercise: the ability to plan). This military mindset was suggested to be developed throughout military experiences and was seen to be a useful coping mechanism throughout the pandemic. Encouraging the veteran to continue to function whilst experiencing mental health challenges.

Within this superordinate theme resilience was suggested to be more prevalent within veterans in comparison to other civilians. Similarly, previous research supports this finding, reporting higher levels of resilience within the veteran population (Carr et al., 2018). Suggesting veterans who had experienced death in combat displayed an enhanced sense of resilience during the transition to widowhood in later life in comparison to civilians (Carr et al., 2018). Concluding, resilience is a process that develops through lived experiences and can be activated as a psychological resource in the case of future adversity (Carr et al., 2018).

The model of resilience proposed by Shafer et al. (2009) stipulates resilience is a three part process: (a) recognising an adverse condition, (b) perceiving that action needs to be taken and (c) activating social resources. A military career often exposes recruits to adversity and thus providing an opportunity to deploy the right course of action along with developing the resources needed to cope in similar situations. There are many comparisons between military experiences and the pandemic, such as food shortages, separation from families and constant references to mortality (Marini et al., 2020). Therefore, due to these similarities, veterans may have already developed a sense of resilience in response to the pandemic. Thus, providing an explanation as to why veterans within the study reported a heighten level of resilience and why this is unique to the veteran population.

As stated, within this subtheme there was an indication that veterans viewed their resilience as a beneficial skill that was utilised throughout the pandemic.

Similarly, previous COVID 19 research highlights the resilience of veterans with pre-existing mental health conditions (Murphy et al., 2022). From this study, the proportion of veterans meeting criteria for PTSD, anger, alcohol misuse, anxiety and depression remained similar despite some variance across two time points (June/July 2020 and July 2021) (Murphy et al., 2022). However, given the continuous nature of the pandemic the mental health consequences on this population may take time to be evident (Murphy et al., 2022). As with the findings of Murphy et al. (2022), resilience was present within this current study; however, the impact of the pandemic on the sample's mental health was also visible. Given this current study recruited during the months of September to December 2021 the author suggests this increase in time exposure to the effects of the pandemic contributed towards the presence of these mental health difficulties. Rather than viewing resilience as an absolute ultimate protective factor from all mental health consequences during the pandemic. The current author suggests this mindset installs an ability within the veteran to survive and to endure the pandemic despite experiencing mental health difficulties.

A further subtheme within this superordinate theme referred to the reflections veterans had towards their operational tours of warzones. Specifically, how these reflections were seen in a positive light whilst living through the pandemic. Veterans demonstrated a level of confidence to overcome adversities during the pandemic given the experiences gained within warzones. Many of these experiences refer to situations whereby there was threat to life and or an uncertainty surrounding survival. Therefore, the difficulties present during the pandemic are not viewed as comparable to the difficulties endured within

warzones. Thus, installing a level of confidence that pandemic related difficulties can be overcome. Similarly, previous research also found veterans who reported exposure to warzone combat believed these experiences enhanced their ability to cope with adversity in later life:

"I was on the front line, rescuing the badly injured and the dying, working long hours under the constant risk of being killed...I managed to show a good deal of courage and good judgement...for the first time in my life I knew I could handle extreme situations" (Elder & Clip, 1989, pp 325)

In agreement with this current study the above excerpt illustrates similar threats to life and survival. Likewise, it is the experience of these difficulties within warzone combat which improved the veteran's ability to cope with adversity in later life.

Many veterans reported the positive impact of physical exercise on wellbeing during the pandemic. Referring to the protective elements physical exercise had on psychological performance and wellbeing. The benefits of exercise on psychological wellbeing is well established, with recent systematic reviews highlighting the benefit of exercise on pre-existing anxiety and depressive symptomatology (Ensari et al., 2015; Ekkekakis, 2015). As a group, veterans perceive sport and exercise to be a useful coping aid for symptoms of mental ill health (Whitworth & Ciccolo, 2016), which this current study supports. Not only providing veterans with improved cardiovascular benefits but also an

opportunity to meet new people (Biddle et al., 2021; Otter & Currie, 2004). More recent evidence conducted during the pandemic noted similar benefits, reporting greater improvements in mood of individuals who exercised in comparison to those that did not (Coyle et al., 2020)

Further subthemes that encapsulated the benefits of a military mindset made reference to the effective use of routine and planning. Both of which were seen to be associated with military training and or experiences. Each attribute of this military mindset was used throughout the pandemic to good effect. Routine was referred to as being automatic in performance and utilised during the most challenging periods of the pandemic. The automatic nature of this skill was suggested to be present due to the length of time spent within the military. An organisation whereby routine is heavily valued and at the centre of a recruit's daily work schedule (Shimp, 2007). Planning, or as one veteran referred to it as "reading the battle picture" enabled them to continue to function throughout the pandemic.

Superordinate theme 2: the negative impact on veteran wellbeing

This second superordinate theme reported the wellbeing consequences on veterans with pre-existing mental health conditions throughout the pandemic, specifically anxiety and depression. This finding is in contradiction with recent systematic reviews which reported no significant change in symptoms amongst individuals with pre-existing mental health conditions (Robinson et al., 2020). However, as documented by Robinson et al., (2020) there was a high degree of observed unexplained heterogeneity, indicating that change in mental health

was highly variable across the review. In addition, there was no control for population, the included studies were from various European, North American and Asian countries, thus limiting generalisability towards the veteran community. Furthermore, the review only covered the time period from January 2020 to January 2021 therefore excluding more recent research into the effects of the pandemic on individuals with pre-existing mental health conditions. Given the continuous nature of the pandemic, Murphy et al., (2022) suggests it may take time to witness the full effect of the pandemic on veteran wellbeing.

As documented within this study, veterans with previous mental health difficulties reported an increase in levels of anxiety during the pandemic. In some cases, citing the implementation of further restrictions or the uncertainty of not knowing when the restrictions will end as factors that increased anxiety. Symptoms of anxiety were noted to align themselves with a diagnosis of Generalised Anxiety Disorder (GAD). Reported cognitions and behavioural patterns of anxiety were consistent with this diagnosis. Additional research found similar findings, reporting GAD (35.3%) to be prevalent within a veteran sample during the pandemic (Richardson et al., 2021). With 53% of veterans within this study reporting the cause of their anxiety to be either directly related to or exacerbated by the pandemic (Richardson et al., 2021). More recent research reported anxiety to be present within 69% of veterans, all of whom had pre-existing mental health conditions (Murphy et al., 2022). Within this study it was also concluded the pandemic exacerbated veterans pre-existing mental health conditions (Murphy et al., 2022).

Many veterans found it difficult to tolerate the uncertainty that was present during the pandemic. The uncertainty of not knowing when restrictions would end and when a normal life would resume was seen to be driving anxiety. Similarly, US veterans also reported uncertainty about the future to be especially taxing and exhausting (Purcell et al., 2021). The multiple and disorientating changes to work, school and home routines created a feared sense that a new normal has been established (Purcell et al., 2021).

Depression was another area of veteran wellbeing that was noted to increase throughout the pandemic. An increase in depressive symptomology was noted along with an acknowledgement that the pandemic was exacerbating pre-existing feelings of depression. A finding that is in support of current research (Purcell et al., 2021). Within this study (Purcell et al., 2021), US veterans were interviewed during the pandemic regarding a number of areas of wellbeing and adaptive functioning. Veterans with pre-existing depression stated the pandemic exacerbated their pre-existing feelings of depression. The removal of usual coping skills due to pandemic restrictions, such as going to the gym, church and attending in person support groups were key reasons as to why depression exacerbated (Purcell et al., 2021).

For some veterans, an increase in suicidal ideation was reported to coexist during periods of depression throughout the pandemic. Veterans stated the pandemic played a role in the development of these thoughts of suicide. A further study found similar findings within Canadian veterans (Richardson et al., 2021). Within this study, nearly 25% of veterans, from a sample of 1139

reported thoughts of suicide. Which the authors concluded was significantly higher than previous rates of suicidal ideation within veteran populations pre pandemic.

However, contrasting research within the US (N=3078) found that rates of suicidal ideation and attempts did not significantly increase from pre-pandemic to peri-pandemic (Nichter et al., 2021). Suggesting the nation's ability to "pull together" during periods of war and disaster as a protective factor for suicidal ideation (Nichter et al., 2021). With this being said, neither study (Nitcher et al., 2021; Richardson et al., 2021) controlled for pre-existing mental health conditions within their veteran samples.

When suicidal ideation is explored solely within veterans with pre-existing mental health conditions during the pandemic, 19.2% of 661 expressed suicidal ideation 1 year into the pandemic (Na et al., 2021). In this study (Na et al., 2021) veterans who reported peri pandemic suicidal ideation had worse financial and social restriction stressors than those without suicidal ideation. Which is consistent with previous research highlighting financial stress during the pandemic can have a negative impact on mental health (Codagnone et al., 2020). Given this study was conducted within the United States (Na et al., 2021) further UK based studies are welcomed to add to this debate.

The final subtheme within this current superordinate theme made reference to the high prevalence of social isolation. 90% of veterans disclosed feelings of social isolation during the pandemic. Such a high prevalence of social isolation is not supported by current research whereby only 27% of veterans reported

feeling isolated during the pandemic (Sharp et al., 2021). However, in contrast to this, further rates of social isolation were found to be prevalent within US veteran samples, highlighting the intense and enduring nature of social isolation (Purcell et al., 2021). Although rates of social isolation may differ, what is conclusive is its consistent presence within veteran samples (Purcell et al., 2021; Sharp et al., 2021). This consistent presence of social isolation is of concern given it has been found to be a key predicator of suicidal events (Thomas et al., 2014) and also increases the probability of a psychiatric admission (Mistry et al., 2001). Thus, these findings have significant service implications which are explored below.

The reduced opportunity to connect with other veterans during the pandemic is a likely cause for the presence of social isolation. Veteran mental health services not only provide the veteran with access to specialist treatment, but it is also a centre for communication and connection with other veterans (Purcell et al., 2021). Many of these opportunities to connect in person with other veterans were restricted due to the changes in service provision limiting in person connection. Although services rapidly deployed virtual forms of connection and treatment (Egede et al., 2020) many veterans believed these options failed to foster connection between each other (Purcell et al., 2021). Therefore, in light of these restrictions, and subsequent failed attempts to promote connection feelings of social isolation emerged.

Superordinate theme 3: Relationships

The final superordinate theme captured the impact of relationships during the pandemic. For some veterans the behaviour of others close to them had a negative impact on their own wellbeing throughout the pandemic. As it was reported by one veteran "My mental health deteriorated quite badly, I was getting quite angry and very irritated with these people". Equally many veterans expressed great concern for the wellbeing of others during the pandemic, specifically family members. Although this current finding is yet to be replicated in veteran research, portraying a strong concern for the wellbeing of close relations throughout the pandemic has been found in the general population (Luttik et al., 2020). Thus, it is plausible to suggest if further research did explore this finding within a veteran population a similar result is likely to be discovered. However, further research would be needed to confirm this suggestion.

4.2 Clinical and service implications

Given that the primary aim of an IPA study is to illuminate the personal accounts of individuals as opposed to produce generalisable results (Smith et al.,2009), the current author is therefore cautious not to provide broad, all-encompassing implications concerning the veteran population. However, conflicting research argues against this point suggesting that for those well acquainted with the topic of interest there is a potential for results to be transferred into appropriate settings (Polit & Beck, 2010). With this in mind, the current author has adopted a balanced approach, where possible navigating the two theoretical arguments.

Providing thoughtful evidence based implications that could be of use to the clinicians and academics interested in this field of study.

As documented, 90% of veterans within this study reported feeling socially isolated during the pandemic. Similar results were also found in previous research (Purcell et al., 2021; Sharp et al., 2021). As highlighted, expressed social isolation within the veteran population has been found to be a key predicator of suicidal events and increase the probability of a psychiatric admission (Thomas et al., 2014; Mistry et al., 2001). Therefore, given the apparent consistency of this result regarding the presence of social isolation, coupled with the serious consequences of it, veteran services are encouraged to act on this information.

For example, it would be important for services working with veterans to actively monitor feelings of social isolation throughout the pandemic via the use of formal measures. For individuals who are reporting feelings of social isolation interventions could be considered to reduce these feelings. This could be done via the creation of weekly group sessions given group based interventions have been found to alleviate feelings of social isolation (Cotterell et al., 2018). In some cases, services may want to consider more individual support. This support could be provided by the services peer support workers given the beneficial role they play in reducing feelings of social isolation along with improving veteran service engagement (Burnell et al., 2017; Weir, et al., 2017).

Furthermore, veterans within this study reported experiencing increased levels of anxiety. Similar findings have been found in current research (Richardson et al., 2021; Murphy et al., 2022). In light of this, clinicians are encouraged to routinely monitor levels of anxiety for veterans accessing the service. In addition, it may be a prudent step for clinicians to seek specific training concerning the treatment of anxiety during the pandemic. Finally, services may wish to create veteran specific resources that provide self-help materials regarding anxiety disorders.

For some veterans an increase in suicidal ideation was experienced as a feature of their depression throughout the pandemic. More recent research supports this finding, highlighting a prevalence of suicidal ideation in veterans with and without pre-existing mental health conditions during the pandemic (Richardson et al., 2021; Na et al., 2021). However, contrasting research within the US found that rates of suicidal ideation and attempts did not significantly increase from pre-pandemic to peri-pandemic (Nichter et al., 2021). With this being said and given the serious nature of the topic in debate a cautious approach may be the most appropriate solution given the contrasting findings.

In light of this, it would be beneficial for services to re-address risk assessment plans for veterans who have a known history of suicidal ideation and or are currently presenting with thoughts of suicide. For these individuals it would be useful to reinforce their knowledge of crisis support numbers along with introducing bespoke coping skills that they could utilise during periods of suicidal ideation. Lastly veteran services are encouraged to re-assess their own

knowledge of current crisis agencies, given the emergence of previously unknown crisis services that have developed in response to the pandemic.

4.3 Suggestions for further research

As discussed above there is conflicting research surrounding the increased presence of suicidal ideation within the veteran population throughout the pandemic. Therefore, the current author would welcome further research to address this difference in results. In addition, quantitative methodologies are welcomed to experimentally investigate the specific themes that have been mentioned within this study.

As this study has shown, veterans with pre-existing mental health conditions noted an increased prevalence of depression and anxiety. This is in line with previous predictions (Murphy et al., 2022). In light of this it may be of interest to further explore the wellbeing of veterans without any pre-existing mental health conditions in order to acquire a broader understanding into pandemic related deficits. Furthermore, to recruit from more vulnerable military populations, such as veterans from the reservist population (Bowes et al., 2018).

4.4 Strengths and limitations

To the authors knowledge, this current project is the first qualitative study broadly exploring the impact of the coronavirus pandemic on the wellbeing of UK veterans. As IPA stipulates a small sample was obtained to facilitate a comprehensive exploration of the personal experiences associated with a specific phenomenon. In doing so highlighting a number of key themes that have been discussed. However, these themes must be read with caution given the small sample size and the absence of participant demographics relating to gender, age and relationship status. Therefore, further claims regarding generalisability, along with the application of the study's results must be viewed in light of these limitations. Given the lack of patient demographics, the impact they could have had upon the study's results is unknown. Thus, the author would welcome further research into this topic area which includes these above patient demographics.

In addition, and as mentioned earlier there was a greater probability for the presence of demand characteristics within the study. This was evident given interviewer was also a trainee clinical psychologist working within the service in which participants were recruited from. Although the interviewer did not recruit participants from their own caseload, other participants who took part in the study may have been aware that the interviewer also worked within the service. Thus, this may have impacted the way participants responded to the questions asked at interview. Finally, critics of IPA studies may suggest the inclusion of a semi-structured interview schedule could restrict the scope for honesty and

influence the direction of theme development. However, with this being said, the interviewer always provided an opportunity at the end of the interview whereby the participant could speak freely to disclose any further information they deemed appropriate or previous information they wished to clarify.

In spite of these limitations mentioned above, there are significant strengths present within this current study. Firstly, the current study has offered a useful contribution to the veteran literature base, which is commonly an underresearched area within UK academia. Further to this, it has shone a light on the impact of the coronavirus pandemic on individual's wellbeing. The coronavirus pandemic appears to be an all-encompassing phenomenon with an ever developing continuous element associated with it. Therefore, research that explores the impact of this phenomenon on wellbeing should be welcomed within the academic field.

4.5 Conclusions

The primary aim of this current study was to explore the impact of the coronavirus pandemic on the wellbeing of veterans who had previous mental health difficulties. Three superordinate themes were highlighted as result of the completion of an IPA methodology. These themes were discussed in relation to current veteran research, and some were noted to be in support of this existing research. In addition, the author noted both the strengths and limitations of this current study. Finally, the author put forward specific clinical and service implications along with suggestions for further research.

4.6 Conflict of interest

This research was conducted and funded as part of the author's Doctoral Degree in Clinical Psychology at the University of Edinburgh, the fees of which were paid for by the NHS Education for Scotland (NES).

References

- Adhikari, S. P., Meng, S., Wu, Y. J., Mao, Y. P., Ye, R. X., Wang, Q. Z., Sun, C., Sylvia, S., Rozelle, S., Raat, H., & Zhou, H. (2020). Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: a scoping review. *Infectious Diseases of Poverty*, 9(1), 1–12. https://doi.org/10.1186/s40249-020-00646-x
- Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. *The Lancet*, 395(10224), 37–38. https://doi.org/10.1016/s0140-6736(20)30309-3
- Barker, C., Pistrang, N., & Elliott, R. (2015). Research Methods in Clinical Psychology: An Introduction for Students and Practitioners (3rd ed.). Wiley-Blackwell.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497
- Biddle, S. J. H., Mutrie, N., Gorely, T., & Faulkner, G. (2021). *Psychology of Physical Activity* (4th ed.). Routledge.
- Bowes, M. A., Ferreira, N., & Henderson, M. (2018). The influence of psychosocial factors in veteran adjustment to civilian life. *Clinical Psychology & Psychotherapy*, 25(4), 583–600. https://doi.org/10.1002/cpp.2182
- Braun, V., & Clarke, V. (2020). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. Counselling and Psychotherapy Research, 21(1), 37–47. https://doi.org/10.1002/capr.12360
- Burnell, K., Needs, A., & Gordon, K. (2017). Exploring the suitability and acceptability of peer support for older veterans. *Quality in Ageing and Older Adults*, 18(2), 120–130. https://doi.org/10.1108/qaoa-09-2016-0036
- Carr, D. C., Ureña, S., & Taylor, M. G. (2018). Adjustment to Widowhood and Loneliness Among Older Men: The Influence of Military Service. *The Gerontologist*, *58*(6), 1085–1095. https://doi.org/10.1093/geront/gnx110
- Codagnone, C., Bogliacino, F., Gómez, C., Charris, R., Montealegre, F., Liva, G., Lupiáñez-Villanueva, F., Folkvord, F., & Veltri, G. A. (2020). Assessing concerns for the economic consequence of the COVID-19 response and mental health problems associated with economic vulnerability and negative economic shock in Italy, Spain, and the United Kingdom. *PLOSONE*, 15(10),e0240876. https://doi.org/10.1371/journal.pone.0240876

- Cotterell, N., Buffel, T., & Phillipson, C. (2018). Preventing social isolation in older people. *Maturitas*, *113*, 80–84. https://doi.org/10.1016/j.maturitas.2018.04.014
- Courtet, P., Olié, E., Debien, C., & Vaiva, G. (2020). Keep Socially (but Not Physically) Connected and Carry on. *The Journal of Clinical Psychiatry*, 81(3). https://doi.org/10.4088/jcp.20com13370
- Coyle, C., Ghazi, H., & Georgiou, I. (2020). The mental health and well-being benefits of exercise during the COVID-19 pandemic: a cross-sectional study of medical students and newly qualified doctors in the UK. *Irish Journal of Medical Science*(1971-),190(3),925–926. https://doi.org/10.1007/s11845-020-02423-z
- Douglas, M., Katikireddi, S. V., Taulbut, M., McKee, M., & McCartney, G. (2020). Mitigating the wider health effects of covid-19 pandemic response. *BMJ*, m1557. https://doi.org/10.1136/bmj.m1557
- Egede, L. E., Ruggiero, K. J., & Frueh, B. C. (2020). Ensuring mental health access for vulnerable populations in COVID era. *Journal of Psychiatric Research*, 129, 147–148. https://doi.org/10.1016/j.jpsychires.2020.07.011
- Ekkekakis, P. (2015). Honey, I shrunk the pooled SMD! Guide to critical appraisal of systematic reviews and meta-analyses using the Cochrane review on exercise for depression as example. *Mental Health and Physical Activity*, *8*, 21–36. https://doi.org/10.1016/j.mhpa.2014.12.001
- Elder, G. H., & Clipp, E. C. (1989). Wartime Losses and Social Bonding: Influences across 40 Years in Men's Lives. *Psychiatry*, *51*(2), 177–198. https://doi.org/10.1080/00332747.1988.11024391
- Ensari, I., Greenlee, T. A., Motl, R. W., & Petruzzello, S. J. (2015). Metaanalysis of acute exercise effects on state anxiety: An update of randomized controlled trials over the past 25 years. *Depression and Anxiety*, 32(8), 624–634. https://doi.org/10.1002/da.22370
- Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of Sport and Exercise*, *13*(5), 669–678. https://doi.org/10.1016/j.psychsport.2012.04.007
- Ge, L., Yap, C. W., Ong, R., & Heng, B. H. (2017). Social isolation, loneliness and their relationships with depressive symptoms: A population-based study. *PLOS ONE*, 12(8), 119-127 https://doi.org/10.1371/journal.pone.0182145
- Guihen, L. (2019). Using interpretative phenomenological analysis (IPA) to explore the career experiences of women deputy headteachers. *International Journal of Research & Method in Education*, *43*(5), 526–540. https://doi.org/10.1080/1743727x.2019.1693537

- Help for Heroes (2020) *Help for heroes charity and service update*. Retrieved June 27, 2022, from https://www.helpforheroes.org.uk/news/help-forheroes-charity-and-services-update/.
- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social Relationships and Mortality Risk: A Meta-analytic Review. *PLoS Medicine*, *7*(7), e1000316. https://doi.org/10.1371/journal.pmed.1000316
- Hossain, M., Tasnim, S., Sultana, A., Faizah, F., Mazumder, H., Zou, L., Mckyer, E. J., Ahmed, H. U., & Ma, P. (2020). Epidemiology of mental health problems in COVID-19: a review. *F1000Res*, 9, 1–16. https://doi.org/10.12688/f1000research.24457.1
- House Of Commons Defence Committee. (2019). *Mental health and the Armed Forces, Part Two: The Provision of Care*. Publications.Parliament.Uk. Retrieved July 24, 2022, from https://publications.parliament.uk/pa/cm201719/cmselect/cmdfence/14 81/1481.pdf
- Hoyt, R. W., Opstad, P. K., Haugen, A. H., DeLany, J. P., Cymerman, A., & Friedl, K. E. (2006). Negative energy balance in male and female rangers: effects of 7 d of sustained exercise and food deprivation. *The American Journal of Clinical Nutrition*, 83(5), 1068–1075. https://doi.org/10.1093/ajcn/83.5.1068
- Hwang, T. J., Rabheru, K., Peisah, C., Reichman, W., & Ikeda, M. (2020). Loneliness and social isolation during the COVID-19 pandemic. *International Psychogeriatrics*, 32(10), 1217–1220. https://doi.org/10.1017/s1041610220000988
- Jennings, P. A., Aldwin, C. M., Levenson, M. R., Spiro, A., & Mroczek, D. K. (2006). Combat Exposure, Perceived Benefits of Military Service, and Wisdom in Later Life. *Research on Aging*, 28(1), 115–134. https://doi.org/10.1177/0164027505281549
- Kezar, A. (2000). The importance of pilot studies: Beginning the Hermeneutic circle. *Research in Higher Education*, 41, 385–400. https://link.springer.com/article/10.1023/A:1007047028758
- Krause-Parello, C. A., & Morales, K. A. (2018). Military Veterans and Service Dogs: A Qualitative Inquiry Using Interpretive Phenomenological Analysis. *Anthrozoös*, *31*(1), 61–75. https://doi.org/10.1080/08927936.2018.1406201
- Lee, H., Aldwin, C. M., Choun, S., & Spiro, A. (2017). Does combat exposure affect well-being in later life? The VA Normative Aging Study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(6), 672–678. https://doi.org/10.1037/tra0000282
- Luttik, M. L. A., Mahrer-Imhof, R., García-Vivar, C., Brødsgaard, A., Dieperink, K. B., Imhof, L., Østergaard, B., Svavarsdottir, E. K., & Konradsen, H.

- (2020). The COVID-19 Pandemic: A Family Affair. *Journal of Family Nursing*, 26(2), 87–89. https://doi.org/10.1177/1074840720920883
- Marini, C. M., Pless Kaiser, A., Smith, B. N., & Fiori, K. L. (2020). Aging veterans' mental health and well-being in the context of COVID-19: The importance of social ties during physical distancing. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), 217–219. https://doi.org/10.1037/tra0000736
- Martin, J. C., & Hartley, S. L. (2017). Lonely, Stressed, and Depressed: The Impact of Isolation on U.S. Veterans. *Military Behavioral Health*, *5*(4), 384–392. https://doi.org/10.1080/21635781.2017.1333064
- Mistry, R., Rosansky, J., McGuire, J., McDermott, C., & Jarvik, L. (2001). Social isolation predicts re-hospitalization in a group of older American veterans enrolled in the UPBEAT Program. *International Journal of Geriatric Psychiatry*, *16*(10), 950–959. https://doi.org/10.1002/gps.447
- Murphy, D., Hendrikx, L. J., Williamson, C., & Baumann, J. (2022). Longitudinal survey of UK veterans with pre-existing mental health difficulties: mental health during the COVID-19 pandemic. *BMJ Military Health*, e002046. https://doi.org/10.1136/bmjmilitary-2021-002046
- Murphy, D., Williamson, C., Baumann, J., Busuttil, W., & Fear, N. T. (2022). Exploring the impact of COVID-19 and restrictions to daily living as a result of social distancing within veterans with pre-existing mental health difficulties. *BMJ Military Health*, *168*(1), 29–33. https://doi.org/10.1136/bmjmilitary-2020-001622
- Na, P. J., Tsai, J., Hill, M. L., Nichter, B., Norman, S. B., Southwick, S. M., & Pietrzak, R. H. (2021). Prevalence, risk and protective factors associated with suicidal ideation during the COVID-19 pandemic in U.S. military veterans with pre-existing psychiatric conditions. *Journal of Psychiatric Research*, 137, 351–359. https://doi.org/10.1016/j.jpsychires.2021.03.021
- Nichter, B., Hill, M. L., Na, P. J., Kline, A. C., Norman, S. B., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2021). Prevalence and Trends in Suicidal Behavior Among US Military Veterans During the COVID-19 Pandemic. *JAMA Psychiatry*, 78(11), 1218. https://doi.org/10.1001/jamapsychiatry.2021.2332
- Nindl, B. C., Billing, D. C., Drain, J. R., Beckner, M. E., Greeves, J., Groeller, H., Teien, H. K., Marcora, S., Moffitt, A., Reilly, T., Taylor, N. A., Young, A. J., & Friedl, K. E. (2018). Perspectives on resilience for military readiness and preparedness: Report of an international military physiology roundtable. *Journal of Science and Medicine in Sport*, 21(11), 1116–1124. https://doi.org/10.1016/j.jsams.2018.05.005
- Oster, C., Morello, A., Venning, A., Redpath, P., & Lawn, S. (2017). The health and wellbeing needs of veterans: a rapid review. *BMC Psychiatry*, *17*(1). https://doi.org/10.1186/s12888-017-1547-0

- Otter, L., & Currie, J. (2004). A long time getting home: Vietnam Veterans' experiences in a community exercise rehabilitation programme. *Disability and Rehabilitation*, 26(1), 27–34. https://doi.org/10.1080/09638280410001645067
- Pancani, L., Marinucci, M., Aureli, N., & Riva, P. (2021). Forced Social Isolation and Mental Health: A Study on 1,006 Italians Under COVID-19 Lockdown. *Frontiers in Psychology*, *12*, 1-10. https://doi.org/10.3389/fpsyg.2021.663799
- Purcell, N., Sells, J., McGrath, S., Mehlman, H., Bertenthal, D., & Seal, K. H. (2021). "Then COVID happened. . .": Veterans' Health, Wellbeing, and Engagement in Whole Health Care During the COVID-19 Pandemic. *Global Advances in Health and Medicine*, 10 (2), 1-15 https://doi.org/10.1177/21649561211053828
- 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. https://doi.org/10.1016/j.ijnurstu.2010.06.004
- Porter, L. S., Astacio, M., & Sobong, L. C. (1997). Telephone hotline assessment and counselling of suicidal military service veterans in the USA. *Journal of Advanced Nursing*, *26*(4), 716–722. https://doi.org/10.1046/j.1365-2648.1997.00357.x
- Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian Journal of Psychiatry*, *52*, 1-5. https://doi.org/10.1016/j.ajp.2020.102066
- Rhead, R., Nicola, F., Greenberg, N., Goodwin, L., & MacManus, D. (2020). *The mental health and treatment needs of UK ex-military personnel.* King College London. Retrieved June 24, 2022, from https://kclpure.kcl.ac.uk/portal/files/161242007/20201012_KCL_UoL_MH Treatment Needs final report digital.pdf
- Richardson, J. D., St Cyr, K., Forchuk, C., Liu, J. J. W., Plouffe, R. A., Le, T., Gargala, D., Deda, E., Soares, V., Hosseiny, F., Smith, P., Dupuis, G., Roth, M., Bridgen, A., Marlborough, M., Jetly, R., Heber, A., Lanius, R., & Nazarov, A. (2021). Well-being of Canadian Veterans during the COVID-19 pandemic: cross-sectional results from the COVID-19 Veteran well-being study. *European Journal of Psychotraumatology*, 13(1), 1-18. https://doi.org/10.1080/20008198.2021.2012374
- Robinson, E., Sutin, A. R., Daly, M., & Jones, A. (2022). A systematic review and meta-analysis of longitudinal cohort studies comparing mental health before versus during the COVID-19 pandemic in 2020. *Journal of Affective Disorders*, 296, 567–576. https://doi.org/10.1016/j.jad.2021.09.098

- Royal British Legion (2014) *A UK Household Survey of the Ex-Service Community* Retrieved June 27, 2022, from https://www.britishlegion.org.uk/get-involved/things-to-do/campaigns-policy-and-research/policy-and-research/the-uk-ex-service-community-a-household-survey
- Salari, N., Hosseinian-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S., & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Globalization and Health*, *16*(1), 234-239 https://doi.org/10.1186/s12992-020-00589-w
- Schafer, M. H., Shippee, T. P., & Ferraro, K. F. (2009). When Does Disadvantage Not Accumulate? Toward a Sociological Conceptualization of Resilience. Schweizerische Zeitschrift Fur Soziologie. Revue Suisse de Sociologie, 35(2), 231–251. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3920188/
- Scottish Government (2012). Our commitments. Scottish government support for the Armed Forces community in Scotland. Scotgov. Retrieved June 24, 2022, from https://digital.nls.uk/pubs/scotgov/2012/9781782560364.pdf
- Sharp, M. L., Serfioti, D., Jones, M., Burdett, H., Pernet, D., Hull, L., Murphy, D., Wessely, S., & Fear, N. T. (2021). UK veterans' mental health and well-being before and during the COVID-19 pandemic: a longitudinal cohort study. *BMJ Open*, *11*(8), 1-10. https://doi.org/10.1136/bmjopen-2021-049815
- Shimp, G. (2007). Soldiers' Lives Through History: The Nineteenth Century (review). *The Journal of Military History*, 71(2), 539–541. https://doi.org/10.1353/jmh.2007.0153
- Sippel, L. M., Watkins, L. E., Pietrzak, R. H., Hoff, R., & Harpaz-Rotem, I. (2019). Heterogeneity of posttraumatic stress symptomatology and social connectedness in treatment-seeking military veterans: a longitudinal examination. *European Journal of Psychotraumatology*, 10(1), 1646091. https://doi.org/10.1080/20008198.2019.1646091
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative Phenomenological Analysis: Theory, Method and Research* (Second ed.). SAGE Publications Ltd
- Smith, J. A., & Osborn, M. (2015). Interpretative phenomenological analysis as a useful methodology for research on the lived experience of pain. *British Journal of Pain*, 9(1), 41–42. https://doi.org/10.1177/2049463714541642

- Solomon, Z., Mikulincer, M., Ohry, A., & Ginzburg, K. (2021). Prior trauma, PTSD long-term trajectories, and risk for PTSD during the COVID-19 pandemic: A 29-year longitudinal study. *Journal of Psychiatric Research*, 141, 140–145. https://doi.org/10.1016/j.jpsychires.2021.06.031
- SSAFA (2017) 41% of Veterans have felt isolated research reveals. (2017, October). Retrieved June 24, 2022, from https://www.cobseo.org.uk/41-veterans-felt-isolated-research-reveals/
- Stapleton, M. (2018). Loneliness and social isolation in the armed forces community. Royal British Legion. Retrieved June 24, 2022, from https://www.britishlegion.org.uk/get-involved/things-to-do/campaigns-policy-and-research/campaigns/loneliness-and-social-isolation
- Thomas, L. P., Palinkas, L. A., Meier, E. A., Iglewicz, A., Kirkland, T., & Zisook, S. (2014). Yearning to Be Heard. *Crisis*, *35*(3), 161–167. https://doi.org/10.1027/0227-5910/a000247
- Trivedi, R. B., Post, E. P., Sun, H., Pomerantz, A., Saxon, A. J., Piette, J. D., Maynard, C., Arnow, B., Curtis, I., Fihn, S. D., & Nelson, K. (2014). Prevalence, Comorbidity, and Prognosis of Mental Health Among US Veterans. *American Journal of Public Health*, 105(12), 2564–2569. https://doi.org/10.2105/ajph.2015.302836
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., McIntyre, R. S., Choo, F. N., Tran, B., Ho, R., Sharma, V. K., & Ho, C. (2020). A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. *Brain, Behavior, and Immunity*, 87, 40–48. https://doi.org/10.1016/j.bbi.2020.04.028
- Weir, B., Cunningham, M., Abraham, L., & Allanson-Oddy, C. (2017). Military veteran engagement with mental health and well-being services: a qualitative study of the role of the peer support worker. *Journal of Mental Health*, *28*(6), 647–653. https://doi.org/10.1080/09638237.2017.1370640
- Whitworth, J. W., & Ciccolo, J. T. (2016). Exercise and Post-Traumatic Stress Disorder in Military Veterans: A Systematic Review. *Military Medicine*, 181(9), 953–960. https://doi.org/10.7205/milmed-d-15-00488
- Williams, K. D. (2009). Chapter 6 Ostracism: A Temporal Need-Threat Model. *Advances in Experimental Social Psychology*, *41*, 275–314. https://doi.org/10.1016/S0065-2601(08)00406-1
- Williamson, V., Stevelink, S. A., Greenberg, K., & Greenberg, N. (2018). Prevalence of Mental Health Disorders in Elderly U.S. Military Veterans: A Meta-Analysis and Systematic Review. *The American Journal of Geriatric Psychiatry*, *26*(5), 534–545. https://doi.org/10.1016/j.jagp.2017.11.001

- Wilson, G., Hill, M., & Kiernan, M. D. (2018). Loneliness and social isolation of military veterans: systematic narrative review. *Occupational Medicine*, 68(9), 600–609. https://doi.org/10.1093/occmed/kgy160
- Yao, H., Chen, J. H., & Xu, Y. F. (2020). Patients with mental health disorders in the COVID-19 epidemic. *The Lancet Psychiatry*, 7(4), e21. https://doi.org/10.1016/s2215-0366(20)30090-0
- Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology & Health*, *15*(2), 215–228. https://doi.org/10.1080/08870440008400302

6.Appendices

6.1 – Appendix 1. Submission guidelines for the Journal of Clinical Psychology and Psychotherapy

The text file should be presented in the following order:

- A short informative title containing the major key words. The title should not contain abbreviations (see Wiley's <u>best practice SEO tips</u>);
- The full names of the authors;
- The authors' complete institutional affiliations where the work was conducted (Institution Name, Country, Department Name, Institution City, and Post Code), with a footnote for an author's present address if different from where the work was conducted;
- Conflict of Interest statement;
- Acknowledgments;
- Abstract, Key Practitioner Message and 5-6 keywords;
- Main text;
- References;
- Tables;
- Figure legends;

6.2 – Appendix 2. Critical Appraisal Skills Programme (CASP) Quality Tool





CASP Checklist: 10 questions to help you make sense of a Qualitative research

How to use this appraisal tool: Three broad issues need to be considered when appraising a qualitative study:

Are the results of the study valid? (Section A)
What are the results? (Section B)
Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills*Programme (2018). CASP (insert name of checklist i.e. Qualitative) Checklist. [online] Available at: URL. Accessed: Date Accessed.

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Paper for appraisal and reference: Section A: Are the results valid?		
Was there a clear statement of the aims of the research?	Yes Can't Tell No	HINT: Consider • what was the goal of the research • why it was thought important • its relevance
Comments:		
2. Is a qualitative methodology appropriate?	Yes Can't Tell No	HINT: Consider If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants Is qualitative research the right methodology for addressing the research goal
Comments:		
Is it worth continuing?		
3. Was the research design appropriate to address the aims of the research?	Yes Can't Tell No	HINT: Consider • if the researcher has justified the research design (e.g. have they discussed how they decided which method to use)
Comments:		
		:



4. Was the recruitment strategy appropriate to the aims of the research? Comments:	Yes Can't Tell No	HINT: Consider If the researcher has explained how the participants were selected If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study If there are any discussions around recruitment (e.g. why some people chose not to take part)
5. Was the data collected in a way that addressed the research issue? Comments:	Yes Can't Tell No	HINT: Consider If the setting for the data collection was justified If it is clear how data were collected (e.g. focus group, semi-structured interview etc.) If the researcher has justified the methods chosen If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews are conducted, or did they use a topic guide) If methods were modified during the study. If so, has the researcher explained how and why If the form of data is clear (e.g. tape recordings, video material, notes etc.) If the researcher has discussed saturation of data
		3



6. Has the relationship between researcher and participants been adequately considered?	Yes Can't Tell No	HINT: Consider If the researcher critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location How the researcher responded to events during the study and whether they considered the
Comments:		implications of any changes in the research design
7. Have ethical issues been	Yes Can't Tell No	HINT: Consider If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study) If approval has been sought from the ethics committee
Section B: What are the results? 7. Have ethical issues been taken into consideration? Comments:	Can't Tell	If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study) If approval has been sought from



I. Is there a clear statement Yes of findings? Can't Tel	If the findings are explicit
	evidence both for and against the
Comments:	the original research question



Section C: Will the results help locally?

10. How valuable is the research?

HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant researchbased literature
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

Comments:			

6

6.3 - Appendix 3. Phase 2 of meta-ethnography (an excerpt of a coding grid taken from Eliacin et al., (2016))

Transcript	Initial notes	Theme
"don't rush or be so judgmental, like you automatically know what's going on with meI don't want to hear you tell me you know what's going on with me(after) 30 minutes. Take time and get to know what's going onI would appreciate it if (you say) "well, gee why don't you come back for a few more visits and we going to find out because I ain't got no idea what's going on with you right now"	A clear preference for the therapist to take their time assessing the veteran in the absence of making quick judgements about them	The importance of a trained professional
"I had to be honest and communicate what's going on with me. I had to be able to say (expletive) I need some help (expletive). I think that's the skill that worked for me"	A self reflection on honesty, recognising that they had some difficulties and they needed professional help	Not recognising the problem
"I was just nervous; I was scared to death. I didn't know if they were going to put me in a [straight] jacket and put me in a rubber room. [Provider] gave me an introduction. That helped me to re-lax She broke the wall down, with our introduction and conversation. She asked me about me, my	Admitting that they were nervous and unsure what was going to happen. The therapist provided an introduction which was helpful, asking about my likes and dislikes, taking their time to complete the assessment across numerous sessions	The importance of a trained professional

family, my likes, my dislikes Second or third visit, she started asking about [mental health]. It wasn't, "Here, you're going to take this and you call me if it doesn't work" It was a nice smooth transition, to get to know each other first. I look forward to her visits"		
"I was a medic. I know there are bad days, good days, but over- all you're supposed to be a caring person if you are in a mental health field You gotta do protocol, policy. Go ahead and do it, but be more personal Turn [from the computer] sometime; just engage. Dig a little bit instead of doing the computer thing"	Mental health professionals should be caring, conducting assessments in a personal way	The importance of a trained professional

6.4 - Appendix 4 Participant Information

Project Title: An explorative study into the impact of the Coronavirus Pandemic on Veterans wellbeing

PARTICIPANT INFORMATION

You are being invited to take part in research exploring the impact of the Coronavirus Pandemic on military veterans' wellbeing. Blair Johnson, a doctoral student in Clinical Psychology from the University of Edinburgh and NHS Lothian is leading on this research. Dr Rachel Happer (University of Edinburgh) and Dr Lucy Abraham (NHS Lothian) are additional members of the research team. Before you decide to take part it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The Coronavirus Pandemic is predicted to have a negative impact on the nation's mental health. Sadly, both social isolation and loneliness are expected to be prevalent during this time, both of which are experienced by many military veterans. The current study wishes to find out if military veterans feel more isolated and lonely during this time along with any other changes they have noted to their wellbeing. Also there is an interest to find out whether or not a veterans previous military experience has helped them cope during the pandemic. The study is keen to find out what, if anything has helped them manage during this time.

WHY HAVE I BEEN INVITED TO TAKE PART?

You are invited to participate in this study because you are a military veteran with a mental health diagnosis, who is currently registered with Veterans First Point and you are 18 years old or above. In addition to this you are currently engaged in therapy or situated on the teams psychological waitlist.

DO I HAVE TO TAKE PART?

No, it is entirely up to you. If you do decide to take part, you are still free to withdraw at any time and without reason. Deciding not to take part or withdrawing from the study will not affect any ongoing or future clinical care. If you decide to take part, please keep this information sheet and complete the informed consent form to show that you understand your rights in relation to the research, and that you are happy to participate.

WHAT WILL HAPPEN IF I DECIDE TO TAKE PART?

After reading this participation information form, and only after agreeing with your clinician you will have a brief phone call with the researcher. This will be there to discuss any questions you may have about the study at this stage. If you decide that you would like to take part in the study after the conversation with the researcher, you will have 21 days to sign and return the consent form

using the self addressed envelope. Once the researcher receives this consent form you will then be posted out an appointment letter for you to take part in a semi-structured interview over the telephone. The interview will take approximately 60 minutes, followed by a 20 minute debrief so please ensure you are in a quiet and comfortable environment for the duration of this time

With your consent, the interview will be audio recorded to enable to researcher to transcribe and analyse participants interviews. The interview itself will consist of a list of questions that are all linked to your own experience of the Coronavirus Pandemic. Given there were multiple different phases to the pandemic, when responding to the questions asked you will be reminded to consider your response in the context of the pandemic in its entirety, as opposed to any particular phase of the lockdown. At the start of the interview the researcher will remind you that you can withdraw yourself and the data you have provided at any point during the interview.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

There are no direct benefits, but the study will allow military veterans to share their own experiences of living through the Coronavirus Pandemic. These experiences could be used to help shape military veteran services across Scotland which could benefit future veterans who engage in services. In addition to this, it's hoped the study may also help to bring a spotlight onto the difficulties military veterans may have faced during this pandemic and what can be done about this now and moving forward.

ARE THERE ANY RISKS ASSOCIATED WITH TAKING PART?

As stated above, and only if you consent you will have to allocate approximately 60 minutes of your time to engage in the phone interview. Regarding the interview itself, there are no significant risks associated with participation in the interview, although you may feel upset when reflecting on your experiences throughout the Coronavirus Pandemic. Therefore you are free to stop the interview at any time without any negative repercussions. There will also be some time at the end of the interview to debrief and to discuss any difficult emotions you have experienced during the interview. If needed, support numbers will be provided and recommendations to seek support from your clinician if appropriate.

WHAT IF I WANT TO WITHDRAW MY DATA FROM THE STUDY?

Agreeing to participate in this project requires you to confirm at the beginning that you wish to take part in the study. You are free to withdraw your consent to participate at any time during the study. However, in order to protect the data that you provide it will be anonymised therefore you will not be able to withdraw your data weeks after completing the interview. You will have 7 working days from the date of the interview to withdraw your data, however if after completing the interview you wish to withdraw your data please let the researcher know immediately.

WILL MY TAKING PART BE KEPT CONFIDENTIAL?

During the interview if you disclose information that puts yourself at risk or others the researcher may need to contact other mental health professionals if deemed appropriate. The researcher will inform you prior to completing this action if needed. Similarly if you share a criminal disclosure, relevant colleagues/organisations may need to be contacted. If you agree to it, your registered GP will be notified that you have opted to take part in the study.

Your data will be processed in accordance with Data Protection Law. All information collected about you will be kept strictly confidential. Your data will be referred to by a unique participant number rather than by name. With your consent, the researcher will audio record the interview. The purpose of this is to enable the researcher to transcribe your interview so it can be analysed. Your recording will be destroyed immediately after it has been transcribed.

All identifiable data that you provide will be stored for 3 – 6 months after the study finishes, after which this data will be destroyed. All of your identifiable information will be destroyed in line with data deletion policies governed by the University of Edinburgh. Regarding your anonymised data this will be stored for a period of 3 years via the use of a long term data repository managed by the University of Edinburgh. After 3 years of storage your anonymised data will be destroyed, again in line with policies governed by the University of Edinburgh. Your data will only be viewed by the researcher/research team. All electronic data will be stored in a locked filling cabinet. Your consent information will be kept separately from your responses in order to minimise risk. The University of Edinburgh is the sponsor for the study based within the United Kingdom. We will be using the information from you in order to undertake this study and will act as the data controller for this study. This means we are responsible for looking after your information and using it properly.

For general information about how we use your data go to:

https://www.ed.ac.uk/records-management/privacy-notice-research

WHAT WILL HAPPEN WITH THE RESULTS OF THIS STUDY?

The results of this study will be written up and submitted for assessment as required by the researchers enrolment in a Doctorate of Clinical Psychology at the University of Edinburgh. Any quotes or key findings will always be made anonymous in any formal outputs, no quotes of key findings will be associated with your name unless we have written permission from yourself prior to doing so. The submission itself will consist of a systematic review and a journal article. The journal article of this submission may be submitted formally to the journal of Clinical Psychology & Psychotherapy for academic audiences to read. You will not be identifiable from any published results. If you would like a summary of the results, please provide your email address on the study debrief form.

WHO IS ORGANISING THE STUDY?

The study has been organised by Blair Johnson with the assistance of Dr Rachel Happer and Dr Lucy Abraham and is sponsored by the University of Edinburgh.

WHO HAS REVIEWED THE STUDY?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee. A favourable ethical opinion has been obtained from Sheffield Research Ethics Committee. NHS Management approval has also been given.

WHO CAN I CONTACT?

If you have any further questions about the study, please contact the lead researcher, Blair Johnson, Email:

. If you would like to speak to somebody independent of the study team please contact Monica McCowat, Email:

If you wish to make a complaint about the study please contact NHS Lothian:

Patient Experience Team, NHS Lothian 2nd Floor Waverley Gate 2-4 Waterloo Place Edinburgh EH1 3EG

0131 536 3370 feedback@nhslothian.scot.nhs.uk

6.5 - Appendix 5. Consent form

CONSENT

Project Title: An explorative study into the impact of the Coronavirus Pandemic on Veterans wellbeing

PLEASE READ THE BELOW ITEMS AND PLACE YOUR INITIALS IN THE BOX PROVIDED NEXT TO EACH ITEM.

	Participant ID: initial	Please
1.	I confirm that I have read and understood the attached participant information sheet for the above study.	
2.	I have been given the opportunity to consider the information provided, ask questions and have had these questions answered to my satisfaction.	
3.	I understand that my anonymised data will be stored for a minimum of 3 years after the study has finished. I understand that my participation is voluntary and at any point I am able to stop the study without any repercussions	
4.	I agree to my interview being audio recorded to enable the researcher to transcribe and analyse the contents of the interview	
5.	I understand that relevant sections of my medical notes and data collected during the study may be looked at by individuals from the regulatory authorities and from the sponsor(s) (NHS Lothian and the University of Edinburgh) where it is relevant to my taking part in this research. I give permission for those individuals to have access to my records	
6.	I agree to my GP being informed of my participation in this study	
7.	I agree to take part in the above study	

Name of person giving consent:

Name:
Signature:
Date:
Name of person taking consent:
Name:
Signature:
Date:

Project Title: The impact of the Coronavirus Pandemic on Veterans' wellbeing

DEBRIEF FORM

Thank you for participating in the study. We hope that you have found it interesting and have not been upset by any of the topics discussed. However, if you have found any part of this experience to be distressing and you wish to speak to one of the researchers you will have time to do so after reading this form. Alternatively you may wish to speak to the researcher at a later date, if this is the case please contact the researcher listed at the bottom of this form. Furthermore please feel free to contact the below organisations attached at the end of the form for further support.

RIGHT TO WITHDRAW YOUR DATA

Upon reflection, you may choose to withdraw your data after completing the interview. If that is the case please let the researcher know within 7 working days from the date of the interview. It is your right to do so please feel free to withdraw your data if needed. Withdrawing your data will have no detrimental impact on any ongoing further clinical input.

CONFIDENTIALITY

All data that you have kindly provided will remain confidential, meaning that any data published will not be traced back to yourself in any way.

FEEDBACK OF RESULTS

If you would like a summary of the results please provide your email address in the space provided below:

WHO CAN I CONTACT?

If you have any further questions about the study please contact the lead researcher, Blair Johnson, Email:

. If you feel you need further support please consider the follow agencies that could offer support;

Veterans First Point, Lothian - 0131 220 9920

Samaritans of Edinburgh and the Lothians – 0330 094 5717Your GP

6.7 – Appendix 7. Sample of annotated transcript

Initial notes	transcript	Emergent themes
	IN: Could you tell me about your experience of living through the Coronavirus Pandemic? Has it been tough? Or have you managed it quite well?	
The increase in restrictions had a negative impact on anxiety. Is there a relationship between restrictions and anxiety?	PI: I hated it, the government kept increasing restrictions which increased my anxiety, the more the restrictions came in the harder it got. My anxiety was increasing by the day, I was all over the place	Increase in anxiety due restrictions
	IN: With regards to your anxiety did you notice anything? Or did nothing change?	
Expressed anxiety started to result in key physical symptoms of anxiety	PI: Well, im not sure if you have ever experienced anxiety but it was like I was trembling in the houseshaking, at times short of breath. I couldn't do anything about it. Sweating also, the thought of it all, like the pandemic would just make me come out in sweats at times	Physical sensations of anxiety
	IN: Did you notice any changes in your overall wellbeing during the Coronavirus Pandemic? If so what changes did you notice? Is there anything you would like to add?	
Depression was worsening. A reduction in appetite, washing. Suicidal ideation	PI: My depression, I felt my depression got worse, I wasn't washing or eating. I would say I also felt as though I wanted to kill myself more than I did	Increase in depression
was increasing which was a new occurrence. A clear sense of just how	before. This was a new thing for me. It was awfultruly awful. I have had thoughts before but this time the number of them	Increase in suicidal ideation

distressing the increase in suicidal ideation was. Who is the participant now? Did they start to lose their notion of reality?

increased. I felt as though...i was considering whether I was going mad or not.

IN: What do you think was driving that suicidal ideation

PI: Not sure, I think I was just fed up. It all got too much

IN: Thanks for sharing that, moving on did you notice any changes in feelings of social isolation or loneliness during the Pandemic? If so what changes did you notice?

Not seeing friends and family had a big impact on social isolation. The number of times they interacted with family and friends had reduced. Is the relationship with friends/family a key factor in social isolation?

PI: Yes, I was more isolated. Like I couldn't see my family or friends. Which for me is a massive thing. I felt way more socially isolated. It wasn't nice. Usually, before Covid I would see my family at least twice a week. We would usually grab a coffee and some food on a weekly basis. Likewise me and my pals are close. Constantly at each other's houses but we couldn't do that. So yeah, social isolation was a big thing for me, it was a real problem. I just can't believe the pandemic has happened if im honest.

Increase in social isolation due to not seeing family and friends.

Key: Descriptive comments in red, conceptual blue, linguistic green

6.8 - Appendix 8. Sample of transcript analysis

Emergent themes in chronological order from sample transcript

Increase in anxiety due restrictions Suffered from panic attacks Harder to manage the panic attacks during COVID Increase in worry Depression escalated faster during COVID Depression was worse during COVID Increase in thoughts of self-harm Increase in suicidal ideation Pursuing a more painful way to commit suicide Increase in depression due isolation Limiting news intake Increase in pain linked to mood Difficulties of isolation The importance of choice Not wanting to burden others with their difficulties Lack of people/services to engage with Mental health impacting physical health physical activity **Planning**

Clustered themes from transcript

IMPACT OF PANDEMIC ON MENTAL HEALTH

- Increase in anxiety due restrictions
- Suffered from panic attacks
- Harder to manage the panic attacks during COVID
- Increase in worry
- Depression escalated faster during COVID
- Depression was worse during COVID
- Increase in thoughts of self-harm
- Increase in suicidal ideation
- Pursuing a more painful way to commit suicide
- Increase in pain linked to mood

ISOLATION

- Increase in depression due isolation
- Difficulties of isolation

OTHERS

- Not wanting to burden others with their difficulties
- Lack of people/services to engage with

MILITARY SKILLS

- Planning
- Physical activity

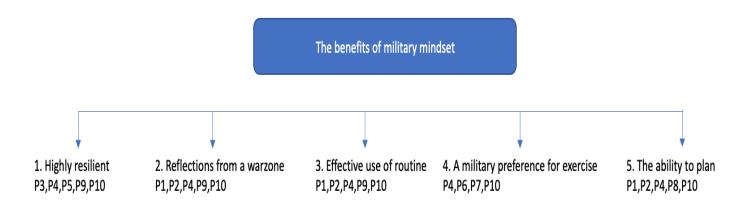
PHYSICAL HEALTH

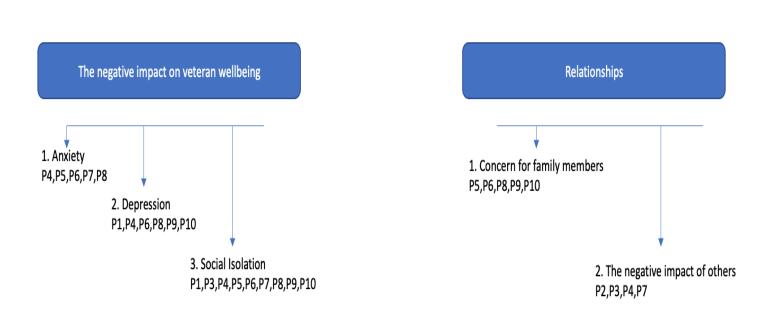
Mental health impacting physical health

COPING SKILLS

- The importance of choice
- Limiting news intake

6.9 - Appendix 9. Step 6 of IPA - looking for shared patterns across cases





7.0 – Appendix 10. Sample of reflective diary excerpts

Extract 1 – reflective diary post after conducting interview 4 linked to my previous assumptions

"Given I work within the field of veterans' mental health I assumed I would have been able to cope with the emotional impact of listening to participants experiences of living through the pandemic. However, I found this interview challenging to listen to, due to the great difficulties experienced by the veteran. It was upsetting to hear how their experience of the pandemic lead to a deterioration in their wellbeing, resulting in thoughts of suicidal ideation and self-harm. Following this I have decided supervision with my field supervisor is essential. We have formally booked in weekly slots of supervision whereby I have the opportunity to discuss any interviews that I found challenging. Allowing me the chance to debrief with my supervisor and to prepare for upcoming interviews.

Despite participant 4's difficulties, they talked at length about how their previous military life had provided them with skills that helped them manage during the pandemic. The beneficial impact of a previous military career is one theme that has started to emerge within dataset already. Although challenging, I came out of this interview feeling a real sense of privilege/honor that the veteran felt comfortable enough to talk to me at length about some to the significant challenges they have faced during the pandemic. Given the emotion that was audible during the interview I wonder whether this was the first time they had shared their difficulties? This experience reinforced my future hopes and aspirations to work within this field of psychology"

Extract 2 – Reflective diary post concerning the process of IPA.

"I am aware that the themes are beginning to fit into relevant clusters. However, given I work clinically within this population I am mindful not to apply my own preconceptions and knowledge of the wider literature base during the process of IPA. I want to ensure when I am conducting the analysis I do so in an objective way, having discussions surrounding my coding with my supervisor will allow me to feel more confident that I am remaining objective"

Extract 3 – reflections upon the researchers prior assumptions

"I feel an overwhelming sense of sadness upon completing my interviews. I knew the pandemic was a difficult time for vets but I didn't realise just how bad it had been. I wasn't expecting to hear some the extreme consequences of the pandemic on social isolation, suicidal ideation and depression. This was surprising given I have listened to many veterans discuss the impact of the pandemic on their wellbeing during clinical therapy. They commonly highlighted it had been a difficult time for them but the level of distress caused and impact on wellbeing that was reported during the interviews was significantly increased. This surprised me. It has made reflect further more upon the importance of supervision. Providing the researcher with the space to discuss any difficult emotions and feelings that were experienced as a result of conducting the projects interviews"

7.1 – Appendix 11 REC approval confirmation letter



25 January 2021

Dr Rachel Happer Senior Clinical Fellow in Clinical Psychology University of Edinburgh School of Health in Social Science 8-9 Hope Park Street University of Edinburgh EH8 9NW

Dear Dr Happer

Study title: An explorative study into the impact of the Coronavirus Pandemic

on veterans wellbeing

REC reference: 21/YH/0007

Protocol number: CAHSS2010/02

IRAS project ID: 289317

Yorkshire & The Humber - Sheffield Research Ethics Committee

Thank you for your letter of 22 January 2021, responding to the Research Ethics Committee's (REC) request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Vice-Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Good practice principles and responsibilities

The UK Policy Framework for Health and Social Care Research sets out principles of good practice in the management and conduct of health and social care research. It also outlines the responsibilities of individuals and organisations, including those related to the four elements of research transparency:

- 1. registering research studies
- 2. reporting results
- 3. informing participants
- 4. sharing study data and tissue

Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

Confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or NHS management permission (in Scotland) should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for HRA and HCRW Approval (England and Wales)/ NHS permission for research is available in the Integrated Research Application System.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

Registration of Clinical Trials

All research should be registered in a publicly accessible database and we expect all researchers, research sponsors and others to meet this fundamental best practice standard.

It is a condition of the REC favourable opinion that **all clinical trials are registered** on a publicly accessible database within six weeks of recruiting the first research participant. For this purpose, 'clinical trials' are defined as the first four project categories in IRAS project filter question 2. Failure to register a clinical trial is a breach of these approval conditions, unless a deferral has been agreed by or on behalf of the Research Ethics Committee (see here for more information on requesting a deferral: https://www.hra.nhs.uk/planning-and-improving-research/research-planning/research-registratio n-research-project-identifiers/

If you have not already included registration details in your IRAS application form, you should notify the REC of the registration details as soon as possible.

Further guidance on registration is available at:

https://www.hra.nhs.uk/planning-and-improving-research/research-planning/transparency-respo nsibilities/

Publication of Your Research Summary

We will publish your research summary for the above study on the research summaries section of our website, together with your contact details, no earlier than three months from the date of this favourable opinion letter.

Should you wish to provide a substitute contact point, make a request to defer, or require further information, please visit: https://www.hra.nhs.uk/planning-and-improving-research/application-summaries/research-sum maries/

N.B. If your study is related to COVID-19 we will aim to publish your research summary within 3 days rather than three months.

During this public health emergency, it is vital that everyone can promptly identify all relevant research related to COVID-19 that is taking place globally. If you haven't already done so, please register your study on a public registry as soon as possible and provide the REC with the registration detail, which will be posted alongside other information relating to your project. We are also asking sponsors not to request deferral of publication of research summary for any projects relating to COVID-19. In addition, to facilitate finding and extracting studies related to COVID-19 from public databases, please enter the WHO official acronym for the coronavirus disease (COVID-19) in the full title of your study. Approved COVID-19 studies can be found at: https://www.hra.nhs.uk/covid-19-research/approved-covid-19-research/

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

After ethical review: Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- 1. Notifying substantial amendments
- 2. Adding new sites and investigators
- 3. Notification of serious breaches of the protocol
- 4. Progress and safety reports
- 5. Notifying the end of the study, including early termination of the study
- 6. Final report
- 7. Reporting results

The latest guidance on these topics can be found at https://www.hra.nhs.uk/approvals-amendments/managing-your-approval/.

Ethical review of research sites

NHS/HSC sites

The favourable opinion applies to all NHS/HSC sites listed in the application subject to confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or management permission (in Scotland) being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS/HSC sites

I am pleased to confirm that the favourable opinion applies to any non-NHS/HSC sites listed in the application, subject to site management permission being obtained prior to the start of the study at the site.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Indemnity insurance]	Version 1	02 October 2020
GP/consultant information sheets or letters [GP Letter]	Version 2	08 January 2021
Interview schedules or topic guides for participants [Interview Schedule]	Version 2	08 January 2021
IRAS Application Form [IRAS_Form_10122020]		10 December 2020
Letters of invitation to participant [Appointment letter]	Version 2	08 January 2021
Organisation Information Document [OID form]	Version 2	08 January 2021
Other [Clinical trials insurance]	Version 1	02 October 2020
Other [Employer liability insurance]	Version 1	02 October 2020
Other [Public liability insurance]	Version 1	02 October 2020
Other [Table of responses]	Version 2	08 January 2021
Other [Debrief form]	Version 2	08 January 2021
Other [Presentation to clinical team]	Version 2	08 January 2021
Participant consent form [Participant consent]	Version 2	08 January 2021
Participant information sheet (PIS) [PIS]	Version 2	08 January 2021
Research protocol or project proposal [Non -CTIMP Protocol]	Version 2	08 January 2021
Schedule of Events or SoECAT [Schedule of Events]	Version 2	08 January 2021
Summary CV for Chief Investigator (CI) [CV for CI]	Version 2	08 January 2021
Summary CV for student [Student CV]	Version 2	08 January 2021
Summary CV for supervisor (student research) [Supervisor CV]	Version 2	08 January 2021

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/

HRA Learning

We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities— see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/

IRAS project ID: 289317 Please quote this number on all correspondence

With the Committee's best wishes for the success of this project.

Yours sincerely

Yvonne Stephenson Vice Chair

Email:sheffield.rec@hra.nhs.uk

Enclosures: "After ethical review – guidance for

researchers" [SL-AR2] Copy to: Ms Charlotte Smith

Lead Nation

Scotland: nhsg.NRSPCC@nhs.net

7.2 – Appendix 12. NHS Lothian ethics approval letter

NHS Lothian – University Hospitals Division



Queen's Medical Research Institute 47 Little France Crescent, Edinburgh, EH16 4T.I

FM/LD/approval

16 June 2021

Mr Blair Johnson NHS Lothian/ UoE School of Health in Social Science Medical place Edinburgh EH8 9AG Research & Development Room E1.16 Tel: 0131 242 3330

Email:

accord@nhslothian.scot.nhs.uk

Director: Professor Alasdair Gray

Dear Mr Johnson

Lothian R&D Project No: 2021/0062 REC No: 21/YH/0007

Title of Research: An explorative study into the impact of the Coronavirus Pandemic on veterans

wellbeing

Participant Information Sheet: Consent Form:

Version 2.0, dated 08 January 2021 Version 2.0, dated 08 January 2021

Protocol: Version 2.0, dated 08 January 2021

Approved Location(s) within NHS Lothian: Veterans First Point

I am pleased to inform you this letter provides Site Specific approval for NHS Lothian for the above study and you may proceed with your research, subject to the conditions below.

We note that this study has obtained Caldicott approval for those aspects of the study that include audio recording. You are responsible for informing the NHS Lothian R&D Office if there are any changes to the study that impact the terms of this approval.

Please note that the NHS Lothian R&D Office must be informed of any changes to the study such as amendments to the protocol, funding, recruitment, personnel or resource input required of NHS Lothian.

Substantial amendments to the protocol will require approval from the ethics committee which approved your study and the MHRA where applicable.

Data controllers and processors have a legal obligation to hold a register of all its information assets (e.g. personal information (data) and/or special categories of personal data held in paper or electronic format for the purpose of clinical research). This R&D management approval is given on the understanding that you, as a potential information asset owner, will register any information assets associated with this research project with your employing organisation (where the data is held) in accordance the Data Protection Act 2018.

Please keep this office informed of the following study information, which is a condition of NHS Lothian R&D Management Approval:

NHS Lothian – University Hospitals Division



- 1. Date you are ready to begin recruitment, date of the recruitment of the first participant and the monthly recruitment figures thereafter.
- 2. Date the final participant is recruited and the final recruitment figures.
- 3. Date your study / trial is completed within NHS Lothian.

I wish you every success with your study.

Yours sincerely

Fiona McArdle (Jun 16, 2021 13:23 GMT+1)

Ms Fiona McArdle Deputy R&D Director

cc Dr Rachel Happer, Chief Investigator, University of Edinburgh

7.3 – Appendix 13. Caldicott Approval Letter

Lothian NHS Board

Waverley Gate 2-4 Waterloo Place Edinburgh EH1 3EG Telephone 0131 465 5452



Mr Blair Johnson
Doctorate in Clinical Psychology Training
Programme
Department of Health in Social Science
Medical Building
University of Edinburgh
Teviot Place
Edinburgh EH8 9AG

Date 17 March 2021 Your Ref Our Ref CG/DF/2118

Enquiries to Caldicott Office Extension 35452 Direct Line 0131 465 5452 Email Caldicott.Guardian@nhslothian.scot.nhs.uk

Dear Mr Johnson

CALDICOTT APPLICATION 2118

Thank you for the information supplied

Request received from	Mr Blair Johnson
Summary of proposal	An explorative study into the impact of the Coronavirus Pandemic on Veterans Wellbeing
Patient identifiable information requested	Forename, Surname, Initials, Address, Post Code, Other: Telephone number
Approved	Yes
Advice	

Yours sincerely

Miss Tracey Gillies Executive Medical Director



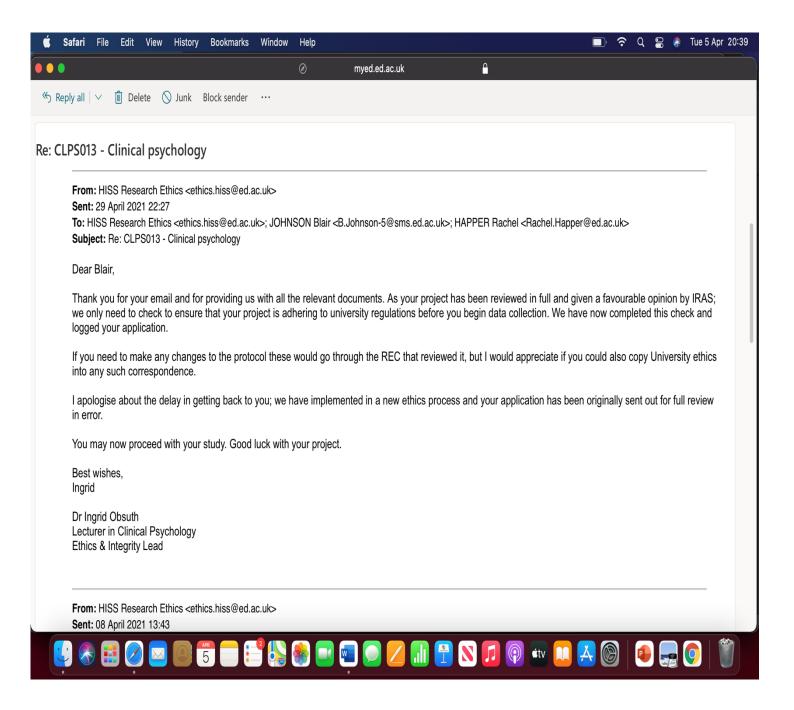




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Interim Chair Eather Roberton Chief Executive Calum Campbell Lothion NHS Board is the common name of Lothion Health Board

7.4— Appendix 14. The University of Edinburgh Ethical approval confirmation



7.5- Appendix 15. Study protocol

Non-CTIMP Study Protocol

Project Title: The impact of the Coronavirus Pandemic on Veterans wellbeing

	The University of Edinburgh and/or Lothian Health Board ACCORD The Queen's Medical Research Institute 47 Little France Crescent Edinburgh EH16 4TJ
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Sponsor number	CAHSS 2010/02
REC Number	21/YH/0007
Version Number and Date	Version 2, 08.01.2021

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LIST OF ABBREVIATIONS

ACCORD	Academic and Clinical Central Office for Research & Development - Joint office for The University of Edinburgh and Lothian Health Board
CI	Chief Investigator
CRF	Case Report Form
GCP	Good Clinical Practice
ICH	International Conference on Harmonisation
PI	Principal Investigator
QA	Quality Assurance
REC	Research Ethics Committee
SOP	Standard Operating Procedure

1. INTRODUCTION

1.1 BACKGROUND

A Veteran can be defined as any individual who has served for at least a day or more in HM Armed Forces, whether as a regular or reservist (Scottish Government, 2012b). The most recent estimates suggest there are approximately 400,000 veterans living in Scotland, with Scotland contributing more military personnel per head of population than any other part of the UK (Scottish Government, 2012b). Historically, it has been challenging to accurately quantify the prevalence of mental health conditions within the veteran population (House of Commons Defence Committee, 2019). A recent report, based on a sample of 9990 regular and reservist recruits found that 19% had common mental health problems (anxiety, depression and insomnia) and 4% met the diagnostic criteria for post-traumatic stress disorder (Fear et al., 2010).

Empirical evidence has reported pre-existing mental health conditions, as well as non-military specific triggers as key factors that contribute to the presence of mental health disorders within veterans (House of Commons Defence Committee, 2019). Regarding non-military specific triggers, social isolation and loneliness have been found to be associated with mental health difficulties within veterans (Wilson et al., 2018) and are reported to be prevalent across veterans from all ages (Royal British Legion, 2014; SSAFA, 2018). Stapleton (2018) explored the prevalence of social isolation and loneliness within the armed forces and found multiple service related factors that contribute to the existence of these concepts. Firstly, the increased volume of transitions in comparison to the general population was found to increase the vulnerability to social isolation and loneliness. Furthermore, military culture itself was seen as a contributing factor, in particular, a culture of self-reliance and the avoidance of help seeking. Finally, recruits who are unexpectedly discharged from the military are placed at a greater risk of loneliness given the sudden loss of identity, stability and support.

Regarding the impact of social isolation and loneliness on mental wellbeing, both have been highlighted as precursors to suicidal events in veterans (Thomas et al., 2014). Furthermore, upon screening calls to crisis hotlines, it was discovered that loneliness was the most common trigger as to why veterans were accessing the hotline (Porter et al.,1997). In addition to the above, social isolation has also been shown to increase the probability of a psychiatric admission (Mistry et al., 2001). Within this study of 123 veterans, those at high or moderate risk of social isolation were four or five times more likely to be readmitted in comparison to veterans reporting low levels of isolation. Further to this, based on a regression analysis from a sample of 67 veterans, loneliness was highlighted as a significant predictor of depression (Martin et al., 2017). The impact of social isolation and loneliness have also been associated with poor physical health. Hawkley et al., (2006) experimentally investigated the impact of loneliness on systolic blood pressure (SBP), concluding that there was an association between higher levels of loneliness and elevated SBP. Further detrimental effects of loneliness on cognitive functioning have been found in elderly populations (James et al., 2011). Finally, in more extreme cases, social isolation and loneliness have been correlated with mortality (Steptoe et al., 2013; Holt-Lunstad et al., 2010).

Returning veterans from Afghanistan displayed benefits from enrolling in volunteering programmes (Matthieu et al., 2017). It was found that feelings of social isolation improved as a result of engaging in the volunteering programme. Further to this, the extent to which a veteran perceives themselves to be stressed has also been found to play a mediating role in reported feelings of loneliness (Martin et al., 2017). In a comparative study between veterans and civilians (Carr et al. 2018), results illustrated that veterans who had experienced death exposure in active duty had significantly lower levels of loneliness in comparison to widowed civilians. This difference was hypothesised to be due to a heightened feeling of resilience in veterans who experienced death in combat. Further research also found that veterans who

had experienced death exposure during active duty were more resilient in many different outcomes across the life course (Elder & Clipp, 1998). In addition to this, longitudinal studies have found veterans to have high levels of autonomy, emotional maturity, mastery and leadership skills (Spiro et al., 2015). In light of this, it is evident that a veterans military career provides lifelong benefits and skills unique to this population. These very skills, most notably a greater level of resilience may provide the veteran community with the capability to cope better during the pandemic. This current study would seek to explore this very question.

In summary, and as illustrated above one of the major consequences of the Coronavirus Pandemic has been the increase in levels of social isolation and loneliness (Mental Health Foundation Trust, 2020) which is predicted to have a negative impact on mental wellbeing (Courtet et al., 2020). This is a concern for clinicians working within the veteran community given both of these concepts are already highly prevalent within the veteran population (Royal British Legion, 2014; SSAFA, 2018). A previous military career can promote a greater sense of resilience in veterans thus providing some benefits during the pandemic (Carr et al., 2018: Elder & Clipp, 1998). This proposed study would be interested to explore whether or not a military career could provide protective factors that could help a veteran cope during the pandemic. Furthermore, given emerging evidence highlighting increased rates anxiety and depression (Brodeur et al., 2020: Cao et al., 2020: Guo et al. 2020) throughout the pandemic, the proposed study would seek to explore impact of the pandemic on veteran wellbeing further.

2. RATIONALE FOR STUDY

See above for the rationale for the proposed study. Concerning benefits there are no direct benefits for the participant however its suggested the service (veterans first point, Lothian) and the NHS more broadly may benefit from the study's findings. Firstly the study would provide the scientific world with a greater understanding of the impact of the pandemic on veteran wellbeing, an area that currently has no published research. Secondly, the results would be of direct benefit to NHS veteran services across Scotland, allowing them to shape service provision in line with the qualitative feedback. This would be of even more significance in the health services preparation for a second or multiple peaks of the coronavirus in the future if this does occur.

2.1 STUDY OBJECTIVES

OBJECTIVES

2.1Primary Objective

To explore the impact of the coronavirus pandemic on veterans wellbeing

2.2Secondary Objectives

- 1. To explore social isolation within a veteran sample during the pandemic,
- 2. To consider the impact of a previous military career on a veteran's ability to cope during the pandemic

3.STUDY DESIGN

<u>Design</u>

An explorative, qualitative design will be utilised to obtain the personal lived experience of veterans throughout the Coronavirus Pandemic. The design will seek to consider their experience of the pandemic, specifically how they have made sense of this unique experience and any significant effects they have noted on their wellbeing. This data will be accessed via the use of semi-structured interviews.

<u>Analysis</u>

Interpretative Phenomenological Analysis (IPA) will represent the method of analysis for the proposed project. As noted above, the study seeks to explore veterans personal experience of the Coronavirus Pandemic, a phenomena that to date lacks published research. By utilizing IPA it is hoped the researcher will obtain rich and detailed data concerning a veterans experience of living through this unique and significant period of a veterans life. In line with the principles of IPA, specifically hermeneutics and phenomenology the researcher will seek supervision from the noted individuals in this document. This will provide an opportunity for the researcher to reflect not only on the lived experience of veterans, but also to be mindful of any significant preconceptions concerning the data given the researcher has also lived through this experience.

Grounded theory was considered as an alternative qualitative analysis, however, given the researcher does not intend to conceptualize a theory that could be applied more widely this method of analysis was ignored for this current proposal. By utilizing IPA the researcher will obtain a rich, detailed and a personal account of a veterans experience of the Coronavirus Pandemic. The researcher will be able to pull out key themes linked to this in the absence of any endeavours to conceptualise a theory. Given IPA is focused on how the individual makes sense of an experience, in this case the Coronavirus Pandemic, discourse analysis was also deemed less appropriate for this proposed study given the significant role language and communication plays in extracting meaning in this form of analysis (Johnstone, 2017).

4.STUDY POPULATION

4.1NUMBER OF PARTICIPANTS

Smith et al. (2009) suggests a sample size of between 4-10 participants for Interpretative Phenomenological Analysis. It is hoped that the current proposal will recruit 10 participants to enable multiple perspectives surrounding a veterans experience of living through the Coronavirus Pandemic. Participants will be recruited from 1 site (veterans first point, Lothian). From point of consent participants will engage in a semi structured interview, followed by debrief which will approximately take around 1 hour and 20 mins.

4.2INCLUSION CRITERIA

- A Veteran, defined as any individual who has served for at least a day or more in HM Armed Forces, whether as a regular or reservist.
- Must have a mental health diagnosis.
- Aged 18 and above.
- Currently registered with Veterans First Point, Lothian.
- Currently engaged in therapy or situated on the teams psychological waitlist.

4.3EXCLUSION CRITERIA

- A learning disability and or neurological impairment which would inhibit the engagement in an interview.
- Veterans who are currently at a point of therapy whereby engaging in research may have a negative impact on therapy outcomes. Clinicians judgement will be used to assess this.
- Significantly high levels of current suicidal ideation whereby the veterans safety is a paramount concern for the clinical team.

4.4 IDENTIFYING PARTICIPANTS

Initially, the researcher will present the proposed study to the clinical team at Veterans First Point, followed by a question and answer session to address any questions clinicians may have. After the presentation clinicians will be provided with participant information sheets, consent forms, self addressed envelopes. Clinicians will be encouraged to review their caseloads to identify prospective participants that meet the inclusion criteria. Once they have identified prospective participants they will briefly discuss the study with the participant during their next clinical session using the participant information sheet to guide this conversation. At this stage participant information sheets and consent forms will be provided to the participant in session. If prospective participants are interested to take part in the study and wish to discuss this further with the researcher, they will provide consent to their clinician to share their contact details (telephone, postal address) with the researcher in order for this initial phone call to take place.

4.5 CONSENTING PARTICIPANTS

After reading the participation information form that was shared via their clinician, and only after agreeing with their clinician the participant will have a brief phone call with the researcher. As noted above, the clinician will specifically ask the prospective participant if they can share their contact details (telephone number, postal address) with the researcher in order for this initial phone call to take place. The phone call itself is there to discuss any questions the participant may have about the study at this stage. If the participant decides that they would like to take part in the study after the conversation with the researcher, they will have 21 days to sign and return the consent form using the self-addressed envelope. Once the researcher receives the consent form an appointment letter will be posted out inviting the participant to take part in a semi-structured interview over the telephone, this will take approximately 60 minutes, followed by a 20 minute debrief. With consent, the semi-interview will be audio recorded to enable to researcher to transcribe and analyse participants interviews

4.6 Withdrawal of Study Participants

Participants are free to withdraw from the study at any point or a participant can be withdrawn by the Investigator. If withdrawal occurs, the primary reason for withdrawal will be documented in the participant's case report form, if possible. The participant will have the option of withdrawal from:

(i) all aspects of the trial but continued use of data collected up to that point . To safeguard rights, the minimum personally-identifiable information possible will be collected.

5. STUDY ASSESSMENTS

5.1STUDY ASSESSMENTS

Semi structured telephone interview

6. DATA COLLECTION

The data will be collected via the use of semi-structured interviews. There will be some flexibility in this approach and the researcher will be guided by the participants responses throughout the interview. Smith et al. (2009) suggests the use questions presented in the following categories; descriptive, narrative, evaluative, contrast, circular, and comparative. It is also noted that regardless of the category of question they should be exploratory as possible and the researcher can utilise prompts throughout the interview. The lead researcher (Blair Johnson) for the study will conduct the interview.

6.1Personal Data

The following personal data will be collected as part of the research:

Name, Telephone number, Address.

Personal data will be stored by the research team at Veterans First Point, Lothian. Personal data will be kept in a separate locked drawer from transcribed interview data. Only the lead researcher will have the key to access drawers. Consent forms will not be kept in the same locked drawer as transcribed interview data in order to protect the identity of the participant.

6.2Data Information Flow

As mentioned above data will be collected via the use of a semi-structured interviews then will be analysed using Interpretative phenomenological analysis. As stated above, signed consent forms will be stored in a locked drawer in the clinical office at Veterans First Point, Lothian. Transcribed data will be kept in a separated locked drawer, again only the researcher will have access to this drawer. To ensure the confidentiality of personal data the study will adhere to the principles of Good Clinical Practice. The voice recorder used during the interview will be an NHS encrypted device and only the researcher will transcribe the interview. After the interview has been transcribed the audio recording of the interview will be destroyed in line with data deletion policies governed by the University of Edinburgh.

All identifiable data will be stored for 3-6 months after the study finishes. Anonymised data will be stored for a period of 3 years via the use of a long term data repository managed by the University of Edinburgh.

6.3Transfer of Data

Data collected or generated by the study (including personal data) will not be transferred to any external individuals or organisations outside of the Sponsoring organisation(s).

6.4Data Controller

A data controller is an organisation that determines the purposes for which, and the manner in which, any personal data are processed.

The University of Edinburgh and NHS Lothian are joint data controllers along with any other entities involved in delivering the study that may be a data controller in accordance with applicable laws (e.g. the site)

6.5Data Breaches

Any data breaches will be reported to the University of Edinburgh and NHS Lothian Data Protection Officers who will onward report to the relevant authority according to the appropriate timelines if required.

7.STATISTICS AND DATA ANALYSIS

7.1 SAMPLE SIZE CALCULATION

Smith et al. (2009) suggests a sample size of between 4-10 participants for Interpretative Phenomenological Analysis. It is hoped that the current proposal will recruit 10 participants to enable multiple perspectives surrounding a veterans experience of living through the Coronavirus Pandemic.

After liaising with Dr Lucy Abraham, Consultant Clinical Psychologist and Clinical Lead for Veterans First Point Lothian, the researcher is confident that the maximum sample size of 10 can be achieved. The clinical team have a vast amount of experience in conducting research and are familiar with the prospect of a Trainee Clinical Psychologist completing a thesis project within the service. Furthermore, current clinical caseloads are within the hundreds with the vast majority meeting the inclusion criteria listed in the proposal. Therefore underlining the researchers confidence to recruit enough participants. Currently the researcher of this proposed project is based within the service on clinical placement. From conversations with active service users, the gratitude and appreciation for the service has been a reflection that has been of significant importance. Active service users are keen to assist in projects that can contribute to a better understanding of a veteran's wellbeing that in the future could play a part in service provision for veterans.

7.2 PROPOSED ANALYSES

As mentioned above Interpretative phenomenological analysis (IPA) will be the method of analysis for this proposed project. Initially interviews will be transcribed and anonymised before data analysis. The analysis process will follow the step by step guide produced by Smith et al. (2009). Transcribed interviews will be read and then re-read in order for the researcher to become both familiar and fully immersed in the data. After which line by line analysis and initial note taking will begin. From working with notes the researcher will then begin to transform these notes into emergent themes before grouping key and consistent themes. A selection of transcripts and notes will be shared with the supervision team to check validity.

8.RISKS

Psychological distress

As this study involves the participant engaging in an interview around their own wellbeing during the Coronavirus Pandemic, there is a chance that participants may become psychologically distressed as a result of this.

Measures

Prior to the interview the participant will be reminded that they have the right to stop the interview at any time. In addition to this they will also be reminded that there is allocated time at the end of the interview to debrief and discuss anything that they found distressing. If a participant does become distressed each participant will be risk assessed on a case by case basis. If further crisis input is needed the researcher will contact these services directly. In addition to this, the researcher will be conducting the interviews from the veterans first point main office via telephone, so in the event a case needs escalating additional clinicians will be present if needed to risk assess and create a safety plan.

9.OVERSIGHT ARRANGEMENTS

9.1 INSPECTION OF RECORDS

Investigators and institutions involved in the study will permit trial related monitoring and audits on behalf of the sponsor, REC review, and regulatory inspection(s). In the event of audit or monitoring, the Investigator agrees to allow the representatives of the sponsor direct access to all study records and source documentation. In the event of regulatory inspection, the Investigator agrees to allow inspectors direct access to all study records and source documentation.

9.2 STUDY MONITORING AND AUDIT

The ACCORD Sponsor Representative will assess the study to determine if an independent risk assessment is required. If required, the independent risk assessment will be carried out by the ACCORD Quality Assurance Group to determine if an audit should be performed before/during/after the study and, if so, at what frequency.

Risk assessment, if required, will determine if audit by the ACCORD QA group is required. Should audit be required, details will be captured in an audit plan. Audit of Investigator sites, study management activities and study collaborative units, facilities and 3rd parties may be performed.

10. GOOD CLINICAL PRACTICE

10.1 ETHICAL CONDUCT

The study will be conducted in accordance with the principles of the International Conference on Harmonisation Tripartite Guideline for Good Clinical Practice (ICH GCP).

Before the study can commence, all required approvals will be obtained and any conditions of approvals will be met.

10.2INVESTIGATOR RESPONSIBILITIES

The Investigator is responsible for the overall conduct of the study at the site and compliance with the protocol and any protocol amendments. In accordance with the principles of ICH GCP, the following areas listed in this section are also the responsibility of the Investigator. Responsibilities may be delegated to an appropriate member of study site staff.

10.3Informed Consent

The Investigator is responsible for ensuring informed consent is obtained before any protocol specific procedures are carried out. The decision of a participant to participate in clinical research is voluntary and should be based on a clear understanding of what is involved.

Participants must receive adequate oral and written information – appropriate Participant Information and Informed Consent Forms will be provided. The oral explanation to the participant will be performed by the Investigator or qualified delegated person, and must cover all the elements specified in the Participant Information Sheet and Consent Form.

The participant must be given every opportunity to clarify any points they do not understand and, if necessary, ask for more information. The participant must be given sufficient time to consider the information provided. It should be emphasised that the participant may withdraw their consent to participate at any time without loss of benefits to which they otherwise would be entitled.

The participant will be informed and agree to their medical records being inspected by regulatory authorities and representatives of the sponsor(s).

The Investigator or delegated member of the trial team and the participant will sign and date the Informed Consent Form(s) to confirm that consent has been obtained. The participant will receive a copy of this document and a copy filed in the Investigator Site File (ISF) and participant's medical notes (if applicable).

10.2.2 Study Site Staff

The Investigator must be familiar with the protocol and the study requirements. It is the Investigator's responsibility to ensure that all staff assisting with the study are adequately informed about the protocol and their trial related duties.

10.2.3 Data Recording

The Principal Investigator is responsible for the quality of the data recorded in the CRF at each Investigator Site.

10.4 Investigator Documentation

 The Principal Investigator will ensure that the required documentation is available in local Investigator Site files ISFs.

10.5 GCP Training

For non-CTIMP (i.e. non-drug) studies all researchers are encouraged to undertake GCP training in order to understand the principles of GCP. However, this is not a mandatory requirement unless deemed so by the sponsor. GCP training status for all investigators should be indicated in their respective CVs.

a. Confidentiality

All, evaluation forms, reports, and other records must be identified in a manner designed to maintain participant confidentiality. All records must be kept in a secure storage area with limited access. Clinical information will not be released without the written permission of the participant. The Investigator and study site staff involved with this study may not disclose or use for any purpose other than performance of the study, any data, record, or other unpublished information, which is confidential or identifiable, and has been disclosed to those individuals

for the purpose of the study.. Prior written agreement from the sponsor or its designee must be obtained for the disclosure of any said confidential information to other parties

10.7 Data Protection

All Investigators and study site staff involved with this study must comply with the requirements of the appropriate data protection legislation (including the General Data Protection Regulation and Data Protection Act) with regard to the collection, storage, processing and disclosure of personal information.

Computers used to collate the data will have limited access measures via user names and passwords.

Published results will not contain any personal data and be of a form where individuals are not identified and reidentification is not likely to take place

11.STUDY CONDUCT RESPONSIBILITIES

11.1 PROTOCOL AMENDMENTS

Any changes in research activity, except those necessary to remove an apparent, immediate hazard to the participant in the case of an urgent safety measure, must be reviewed and approved by the Chief Investigator.

Amendments will be submitted to a sponsor representative for review and authorisation before being submitted in writing to the appropriate REC, and local R&D for approval prior to participants being enrolled into an amended protocol.

11.2 MANAGEMENT OF PROTOCOL NON COMPLIANCE

Prospective protocol deviations, i.e. protocol waivers, will not be approved by the sponsors and therefore will not be implemented, except where necessary to eliminate an immediate hazard to study participants. If this necessitates a subsequent protocol amendment, this should be submitted to the REC, and local R&D for review and approval if appropriate.

Protocol deviations will be recorded in a protocol deviation log and logs will be submitted to the sponsors every 3 months. Each protocol violation will be reported to the sponsor within 3 days of becoming aware of the violation. All protocol deviation logs and violation forms should be emailed to QA@accord.scot

Deviations and violations are non-compliance events discovered after the event has occurred. Deviation logs will be maintained for each site in multi-centre studies. An alternative frequency of deviation log submission to the sponsors may be agreed in writing with the sponsors.

11.3 SERIOUS BREACH REQUIREMENTS

A serious breach is a breach which is likely to effect to a significant degree:

- (a) the safety or physical or mental integrity of the participants of the trial; or
- (b) the scientific value of the trial.

If a potential serious breach is identified by the Chief investigator, Principal Investigator or delegates, the cosponsors (seriousbreach@accord.scot) must be notified within 24 hours. It is the responsibility of the cosponsors to assess the impact of the breach on the scientific value of the trial, to determine whether the incident constitutes a serious breach and report to research ethics committees as necessary.

11. 4 STUDY RECORD RETENTION

All study documentation will be kept for a minimum of 3 years from the protocol defined end of study point. When the minimum retention period has elapsed, study documentation will not be destroyed without permission from the sponsor.

11.5 END OF STUDY

The end of study is defined as the last participant's last visit.

The Investigators or the co-sponsor(s) have the right at any time to terminate the study for clinical or administrative reasons.

The end of the study will be reported to the REC, and R+D Office(s) and co-sponsors within 90 days, or 15 days if the study is terminated prematurely. The Investigators will inform participants of the premature study closure and ensure that the appropriate follow up is arranged for all participants involved. End of study notification will be reported to the co-sponsors via email to resgov@accord.scot

A summary report of the study will be provided to the REC within 1 year of the end of the study.

11.6 INSURANCE AND INDEMNITY

The co-sponsors are responsible for ensuring proper provision has been made for insurance or indemnity to cover their liability and the liability of the Chief Investigator and staff.

The following arrangements are in place to fulfil the co-sponsors' responsibilities:

- The Protocol has been designed by the Chief Investigator and researchers employed by the University
 and collaborators. The University has insurance in place (which includes no-fault compensation) for
 negligent harm caused by poor protocol design by the Chief Investigator and researchers employed by
 the University.
- Sites participating in the study will be liable for clinical negligence and other negligent harm to
 individuals taking part in the study and covered by the duty of care owed to them by the sites concerned.
 The co-sponsors require individual sites participating in the study to arrange for their own insurance or
 indemnity in respect of these liabilities.
- Sites which are part of the United Kingdom's National Health Service will have the benefit of NHS Indemnity.
- Sites out with the United Kingdom will be responsible for arranging their own indemnity or insurance
 for their participation in the study, as well as for compliance with local law applicable to their
 participation in the study.

12. REPORTING, PUBLICATIONS AND NOTIFICATION OF RESULTS

13. AUTHORSHIP POLICY

Ownership of the data arising from this study resides with the study team.

14. REFERENCES

- Burnell, K., Needs, A., Gordon, K. (2017). Exploring the suitability and acceptability of peer support for older veterans. *Quality in Ageing Older Adults, 18,* 120–130
- Brodeur, A., Clark, A., Fleche, S., Powdthavee (2020) COVID-19, Lockdowns and Well-Being: Evidence from Google Trends, *in press*
- Cao. W et al., (2020) The psychological impact of the COVID 19 Epidemic on College students in China. *Psychiatry Res*, 287
- Carr, D.C., Urena, S., Talyor, M. G. (2018) Adjustment to Widowhood and Loneliness Among Older Men: The Influence of Military Service. *The Gerontologist*, 58, 1085–1095.
- Courtet, P., Olie, C., Debein, C., Vaiva, G. (2020) Keep socially (but not physically) connected and carry on: preventing suicide in the age of COVID-19. *Journal of Clinical Psychiatry*, 81, 912-920
- Doenges, T. (2011). Calling and meaningful work among student military veterans: Impact on wellbeing and experiences on campus, *Academia*, 1-131
- Elder, G. H., & Clipp, E. C. (1988). Wartime losses and social bond- ing: Influences across 40 years in men's lives. *Psychiatry*, 51, 177–198
- Fear, N.T. (2010) What are the consequences of deployment to Iraq and Afghanistan on the mental health of the UK armed forces? A cohort study. *The Lancet*, *375*, 1783-1797.
- Guo, J. et al., (2020) Psychological effects of COVID-19 on hospital staff: A National Cross Sectional Survey of China Mainland. *The Lancet*,
- Hawkley, L. C., Cacioppo, J. T. (2010) Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, 40, 218–227.
- Holt-Lunstad, J., Smith, T. B., Layton, J. B. (2010) Social relationships and mortality risk: a meta-analytic review. *PLoS Med*, 7.
- House Of Commons Defence Committee. (2019, February 19). *Mental health and the Armed Forces, Part Two: The Provision of Care*. Publications.Parliament.Uk. Retrieved July 24, 2022, from https://publications.parliament.uk/pa/cm201719/cmselect/cmdfence/1481/1481.pdf
- James, B. D., Wilson, R. S., Barnes, L. L., Bennett, D. A. (2011) Late life social activity and cognitive decline in old age. *Journal of International Neuropsychological Society*, 17, 998–1005.
- Johnstone, B., (2017) Discourse Analysis: Third edition. USA: Wiley-Blackwell

- Matthieu, M. M., Lawrence, K. A., Robertson-Blackmore, E. (2017) The impact of a civic service program on biopsychosocial outcomes of post 9/11 U.S. military veterans. *Psychiatry Res*, 248, 111–116.
- Martin, J. C., Hartley, S. L. (2017) Lonely, stressed, and depressed: the impact of isolation on US veterans. *Military Behavior Health*, 384–392
- Mistry, R., Rosansky, J., McGuire, J., McDermott, C., Jarvik, L. (2001) Social isolation predicts re-hospitalization in a group of older American veterans enrolled in the UPBEAT program. Unified psychogeriatric biopsychosocial evaluation and treatment. *International Journal of Geriatric Psychiatry*, 16, 950-959.
- Porter, L. S., Astacio, M., Sobong, L. C., (1997) Telephone hotline assessment and counselling of suicidal military service veterans in the USA. Journal of Advanced Nursing, 26, 716–722
- Royal British Legion. (2014) A UK Household Survey of the Ex-Service Community. London: The Royal British Legion.
- Scottish Government. (2012b). Our commitments Scottish government support for the Armed Forces community in Scotland.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative Phenomenological Analysis: Theory, Method and Research.* London: Sage
- Spiro, A., Settersten, R. A., & Aldwin, C. M. (2016). Long-term outcomes of military service in aging and the life course: A positive revisioning. *The Gerontologist*, 56, 5
- Stapleton M. Loneliness and Social Isolation in the Armed Forces Community. Royal British Legion, London, 2018
- Steptoe, A., Shankar, A., Demakakos, P., Wardle, J. (2013) Social isolation, loneliness, and all-cause mortality in older men and women. *Proc Natl Acad Sci*, 110,5797–5801.
- SSAFA. (2017) 41% of Veterans Have Felt Isolated, Research Reveals. SSAFA. https://www.ssafa.org.uk/latest/41-veterans- have-felt-isolated-research-reveals
- Thomas, L. P. M., Palinkas, L. A., Meier, E. A., Iglewicz, A., Kirkland, T., Zisook, S. (2014) Yearning to be heard: what veterans teach us about suicide and effective interventions. *Crisis: The journal of crisis intervention and suicide prevention, 35*, 161-167.
- The Mental Health Foundation Trust (2020). Living with the pandemic if you already have mental health problems.
- Wilson, G., Hill, M., Kiernan, M. D. (2018). Loneliness and social isolation of military veterans: systematic narrative review. *Occupational Medicine*, *68*, 600-609.
- Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology & Health*, 15, 215-228.

Zhang, S. X., Wang, Y., Rauch, A., Wei, F. (2020) Unprecedented disruption of lives and work: Health, distress and life satisfaction of working adults in China one month into the COVID-19 outbreak. *Psychiatry Research*, 288, 112958