ENHANCE Study

Improving access to evidence-based treatment for women veteran survivors of sexual trauma

Final Report

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Research Department, Combat Stress
2023

COMBAT STRESS
FOR VETERANS' MENTAL HEALTH

funded by Office for Veterans' Affairs

Contents

About Combat Stress

Combat Stress is the UK's leading charity for veterans' mental health. Operating for over a century, today Combat Stress provides specialist treatment and support for former servicemen and women from every military branch and conflict, focusing on those with complex mental health issues. Combat Stress operates all over the UK, on the phone, online, in the community, and at specialist centres.

Founded in 2013, the Combat Stress Research Department is academically independent and committed to producing high-quality and robust translational research of direct relevance to the veteran community. It is co-located with the King's Centre for Military Health Research (KCMHR), King's College London. The Department publishes in peer-reviewed journals and works closely with leading international academic, governmental and defence organisations to contribute to the advancement of the veteran mental health field. Further information on research at Combat Stress and downloadable publications can be found at combatstress.org.uk/research.

Authors

Principal Investigator, **Professor Dominic Murphy** gained his first degree in psychology from the University of Glasgow before joining the team that established the King's Centre for Military Health Research (KCMHR). He gained his doctorate at KCMHR in 2010 and then trained as a clinical psychologist at Royal Holloway. In 2013 he joined Combat Stress where he established and now leads the Research Department, specialising in veteran mental health. His work on veteran mental health is recognised both nationally and internationally, and to date he has published over 200 academic journal articles.

He is President of the UK Psychological Trauma Society, a Director/Trustee of the Forces in Mind Trust, a Director/Treasurer of the European Society for Traumatic Stress Studies, a participant in the Five Eyes Veteran Mental Health Consortium and NATO working groups, and is linked with the NHS Serving and Ex-Serving Women's Health Improvement Group.

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Acknowledgements

The authors would like to extend their heartfelt thanks to the women veterans who generously shared their experiences, and kindly gave their time to participate in this study. In addition, gratitude is extended to the Women's Royal Army Corps Association for their continued assistance, as well as the expert stakeholders whose expertise, guidance, and time were extremely valuable. Finally, the authors wish to acknowledge co-investigators Dr Victoria Williamson and Natasha Biscoe, as well as colleagues in the Combat Stress Research Department who provided continued support throughout.

Sex and gender-based language

This document uses gender-based language throughout. Where sex-based terms are used, they are done so consciously where biological sex is directly relevant to the subjects.

Terminology

The academically accepted term 'military sexual trauma' (MST) is used throughout this report to reference sexual trauma that occurred during military service. The UK Government does not use this term.

Declaration

The ENHANCE study was funded by the Office for Veterans' Affairs under grant number G2-SCH-2021-12-9578/79. The authors have no conflicts of interests to declare. The study and investigating team remain academically independent from the funding body.

Glossary & Abbreviations

Accelerated Resolution Therapy (ART) An exposure-based therapy which encompasses elements of eye movement desensitisation and reprocessing (EMDR) and cognitive behavioural therapy, delivered in a truncated number of sessions.

Caseness The score threshold on a measure of psychological functioning at and beyond which a person could be considered to potentially meet a particular diagnosis.

Clinician-Administered PTSD Scale (CAPS; CAPS-5) A psychometric measurement tool of PTSD symptoms, conducted by a clinician and used in diagnosis. Versions are updated in parallel with changes in the diagnostic manual.

Cognitive Processing Therapy (CPT) A form of manualised (structured), trauma-focused cognitive behavioural therapy originally developed for survivors of interpersonal and sexual violence. There is a particular focus on reducing self-blame.

Complex posttraumatic stress disorder (CPTSD) A mental health condition which may result from experiencing or witnessing repeated traumatic event(s), particularly of an interpersonal nature. CPTSD is characterised by the core symptoms seen in PTSD as well as additional problems with interpersonal relationships, negative views of the self, and emotional regulation.

Effect size A statistical result which provides a value measuring the intensity of a relationship between two variables. Categorised into small, medium and large, effect sizes range from -1.0 to +1.0 and are reported using the Cohen's *d* statistic. In the context of this study, it shows how big an impact a particular treatment can be said to have on psychological symptoms.

ENHANCE The name by which the current study was referred.

Eye Movement Desensitisation and Reprocessing (EMDR) A structured psychological treatment, typically involving recalling a traumatic incident while making side-to-side eye movements (bilateral stimulation), for example by following the movement of a therapist's finger.

Guided Imagery and Music (GIM) A non-trauma-focused form of music psychotherapy that uses selected music to evoke sensory and emotional responses in the patient, which can then be addressed in relation to existing personal coping mechanisms.

Life Events Checklist for DSM-5 (LEC-5) A measurement tool of experiences that may act as precursors to the development of PTSD symptoms.

Military sexual trauma (MST) The accepted academic term for experiences of sexual assault, harassment and bullying that occur during and within a military context and service.

National Institute for Health and Care Excellence (NICE) An executive non-departmental public body of the Department of Health and Social Care in England that evaluates the evidence base and publishes guidelines on clinical practice and treatment.

Non-trauma-focused therapy An umbrella term for therapeutic interventions which aim to reduce PTSD symptoms, but which do not directly address memories of the traumatic event or thoughts and feelings related to the traumatic event.

Posttraumatic stress disorder (PTSD) A mental health condition which may result from experiencing or witnessing a traumatic event(s). PTSD is characterised by intrusive memories or re-experiencing, avoidant behaviours, negative changes in thinking and mood, and changes in physical and emotional reactions. These symptoms persist beyond the point following experiencing a traumatic event for which they will fade in most people.

Present-Centered Therapy (PCT) A non-trauma-focused therapy concentrating on increasing adaptive responses to stressors and difficulties related to trauma and/or PTSD. Frequently used as comparison or control condition in studies of therapeutic interventions.

Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Agreed guidelines to improve transparency and scientific merit in systematic reviews and meta-analysis. PRISMA states the minimum set of items for accurate and adequate reporting of results.

Prolonged Exposure therapy (PE) A trauma-focused therapy which focuses on avoidant behaviours in PTSD, and involves exposure to the source and effects of trauma. Exposure may involve imagining the event(s) and experience(s) (imaginal exposure), and real-world exposure to stressors (*in vivo* exposure). PE is not widely used in the UK, although elements of exposure may be included in other trauma-focused therapies.

PROSPERO An international online register of studies and systematic reviews to help avoid duplication and encourage scientific transparency.

PTSD Checklist (PCL; PCL-5; PCL-M; PCL-S) A self-report psychometric measure of PTSD symptoms. Versions are updated in parallel with changes in the diagnostic manual, as well as applicability to specific populations (for example, military personnel and veterans).

QualSyst Risk of Bias framework A reporting framework used to assess the quality of published academic and clinical studies.

Reflexive thematic analysis (RTA) A qualitative analytical approach developed by Braun and Clark used to develop and explore patterns of meaning across a dataset in order to answer a research question(s).

Skills Training in Affective & Interpersonal Regulation (STAIR) A non-trauma-focused treatment centred on improving skills concerning interpersonal relationships and emotion regulation.

Systematic review A methodological synthesis and summary of available primary research concerning a particular research question(s). Systematic reviews follow an established design and procedure.

Trauma-focused therapy An umbrella term for therapeutic interventions which aim to reduce PTSD symptoms and which directly address memories of the traumatic event or thoughts and feeling related to the traumatic event. This may involve detailed recall of the events.

Trauma-Sensitive Yoga (TSY) A non-trauma-focused intervention, based on hatha yoga which aims to empower and foster a positive relationship with an individual's body. Also referred to as Trauma Center Trauma-Sensitive Yoga (TCTSY).

Veteran Anyone who has served for at least one day in His Majesty's Armed Forces (Regular or Reserve) or Merchant Mariners who have seen duty on legally defined military operations.

Warrior Renew (WR) A non-trauma-focused intervention approach which emphasises an individual's processing of emotions, internal images and associations with others, in order to impact their own understanding and sense of self.

Project Outputs

Peer reviewed papers

Campbell GM, Williamson V, Murphy D. 'A hidden community'. The experiences of help-seeking and receiving mental health treatment in UK women veterans: a qualitative study. *Armed Forces and Society*. 2023. DOI: 10.1177/0095327X231182140

Campbell GM, Biscoe N, Williamson V, Murphy, D. Evidence-based treatments for PTSD symptoms secondary to military sexual trauma in women veterans: a systematic review. Under review.

Presentations & Conferences

Murphy D. *Understanding the mental health needs of women veterans, the impact of military sexual trauma and evidence-based guidance for treatment.* Presented at Centre for Military Women's Research, Anglia Ruskin University; UK; Forthcoming.

Murphy D. *Needs of UK female veterans and recommendations for guidance to best support survivors of military sexual trauma*. Presented at International Colloquium on Military Sexual Trauma and Other Forms of Abuse; Australasia; 2023 May.

Murphy D. *Understanding military sexual trauma*. MSc Psychological Trauma, University College London; UK; Lecture 2023 May.

Campbell GM. *Gender-sensitive services*. Presented at Veterans' People, Pathways and Places Programme (VPPP) education seminar; UK; 2023 May.

Campbell GM. *'A hidden community'. The experiences of help-seeking and receiving mental health treatment in UK women veterans*. Presented at British Psychological Society Defence & Security Section Conference; UK; 2023 May.

Murphy D. *Understanding moral injury and military sexual trauma.* Presented at Lithuanian Trauma Society Conference; Lithuania; 2023 March.

Campbell GM. *Female veterans and military sexual trauma: impacts and treatment*. Presented at The Forces in Mind Trust (FiMT) Research Centre Annual Conference; UK; 2023 March.

Other

Women Veterans: improving understanding and access to treatment. A guided video presentation. Available at: tinyurl.com/ENHANCEvideo

Supporting access to care for women veterans with experiences of military sexual trauma. An education infographic. Available at: tinyurl.com/ENHANCEgraphic

Executive Summary

Improving access to evidence-based treatment for women veteran survivors of sexual trauma

Introduction

Experiences of sexual harassment, bullying and assault during military service – defined in the international research literature as military sexual trauma (MST) – are pervasive across militaries, cultures, and time periods. Servicewomen are disproportionately the targets, with a range of a third to more than half of women reporting experiences of MST during military service. Research suggests that unfortunately, such figures are likely to be underestimates. Research by Combat Stress and others has shown that experiences of MST are linked with an increase in likelihood of reporting symptoms of PTSD, anxiety, and depression, as well as poor social support in later life as a veteran. Indeed, MST is considered one of the leading causes of PTSD amongst women veterans.

Given the prevalence of the range of experiences defined as MST and their psychological consequences, improving access to best-quality evidenced mental health treatment for women veterans is judicious. The ENHANCE study, which was funded by the Office for Veterans' Affairs, and conducted by Combat Stress, aimed to understand both best evidence treatment, and women veterans' experiences of help-seeking. It is hoped that the findings and recommendations detailed in this report may contribute to ensuring that women veterans receive mental health support and treatment appropriate to their needs.

Methods

The ENHANCE study comprised three discrete but linked work packages, which are detailed in this report. In addition, Combat Stress convened an expert stakeholder group comprising veteran experts, healthcare professionals, and those with lived experience to provide input at all stages to help co-produce the findings.

The first work package comprised a systematic review of the available literature on psychological treatments for PTSD resulting from MST in women veterans. Twelve papers were reviewed, from which seven different treatments and their efficacy were studied.

The second work package comprised interviews with 19 women veterans, all of whom reported symptoms of PTSD in the preceding two years. The interviews covered these women's experiences of mental health difficulties and help-seeking over the life course, including both during and after military service. It included both veterans who had and had not sought help and treatment.

The final work package synthesised the findings from the previous packages, to produce information materials on MST and treatment for PTSD in women veterans, for professionals working with veterans. This knowledge mobilisation is detailed within the report.

Key Findings

TRAUMA-FOCUSED THERAPIES HAVE THE LARGEST AND BEST QUALITY BODY OF EVIDENCE FOR EFFICACY IN TREATING PTSD RESULTING FROM MILITARY SEXUAL TRAUMA (MST) IN WOMEN VETERANS.

Trauma-focused therapies are a group of treatments which include specific emphasis on the original traumatic experience(s). Whilst the majority of the evidence reviewed in this report comes from studies in the US, this finding is in line with NICE guidance on the treatment of PTSD in general. Our systematic review also found that there is emergent evidence for the efficacy of non-trauma-focused therapies which do not focus specifically on the traumatic experiences themselves (i.e. Trauma-Sensitive Yoga).

COGNITIVE PROCESSING THERAPY (CPT) IS CURRENTLY THE BEST-EVIDENCED TREATMENT FOR PTSD RESULTING FROM MST IN WOMEN VETERANS.

CPT is a form of trauma-focused therapy and was originally designed for those with sexual trauma histories. Compared to other trauma-focused therapies, CPT potentially attends to a wider range of psychological consequences specific to sexual trauma such as feelings of shame and self-blame. CPT has been shown to have efficacy in reducing PTSD symptoms at 6-months after treatment. The studies in our systematic review are all of veteran and military samples in the United States, where CPT is recommended by the Veterans' Health Administration as a first line treatment for PTSD arising from MST.

WOMEN VETERANS REPORT GENDER-SPECIFIC THEMES SUCH AS 'BELIEFS ABOUT MENTAL HEALTH AND HELP-SEEKING', AND A 'SENSE OF BELONGING IN GROUPS', AS IMPORTANT WHEN THEY DESCRIBE THEIR EXPERIENCES OF MENTAL HEALTH DIFFICULTIES AND SUPPORT.

These themes are in addition to those reported by veterans in general, and are specifically related to women veterans' experiences as a minority during military service and as a veteran. This includes their experiences of MST. Women veterans in this study reported that military attitudes concerning stoicism and equating illness with weakness act as a barrier to help-seeking both during and after military service. These attitudes appeared to be heightened due to their gender, when compared to veteran men. In particular, openly accepting that they needed mental health support was viewed as potentially detrimental to and undermining efforts for equality and parity during their military service, that was characterised by discrimination. Similarly, women veterans reported being fearful of the negative consequences of speaking up and asking for support during their military service, namely further discrimination or discharge. Consequently, women veterans reported being 'conditioned' not to speak up or seek help when they are in need, and these behaviours persisted into life as a veteran. These beliefs were viewed as having been addressed and changed in the course of successful engagements with health professionals.

Traumatic experiences – particularly those involving MST – were also reported as being invalidated and minimised by both women veterans themselves and other (men) veterans alike. This contributed to a wider lack in a sense of belonging in the veteran community and environments.

WOMEN VETERANS WISH TO BE ACKNOWLEDGED AS UNIQUE IN SUPPORT AND TREATMENT PROVISION.

In this study, women veterans who had experienced MST reported that they would be reluctant to engage with veteran treatment and support environments because they were both military and men-dominated in nature; both of which could be salient components of their traumatic experiences.

In general, the participants in this study recognised the sense of belonging, camaraderie and understanding that came with interacting with other veterans in a military- or veteran-specific environment, in contrast to civilian-dominated groups. This finding is in line with studies of veterans in general. However, women veterans also reported that they can feel marginalised in such groups on account of their gender, and that veteran groups and environments are men-dominated and focused.

WOMEN VETERANS PERCEIVE THAT HEALTH CARE PROFESSIONALS AND PROVISION DO NOT FULLY UNDERSTAND THEIR NEEDS AND EXPERIENCES.

The participants in this study reported that health care professionals do not always understand the needs and military experiences of women veterans. General care professionals (such as GPs) were reported as being unaware of women veterans and that military experience was not considered in women patient histories. Veteran-specific specialist providers were viewed as attending to the needs of the men veteran majority. Successful treatment was seen as individualised, considering the whole of the veteran's life course and experiences, and not just limited to their time in the military.

STAKEHOLDERS VALIDATED THE EXPERIENCES OF WOMEN VETERANS IN THIS STUDY, HIGHLIGHTING THE WIDER IMPACT OF BEING A MINORITY DURING MILITARY SERVICE.

Stakeholders acknowledged that MST encompasses a range of gender-based experiences, all with potentially long-term and negative impacts on veterans. However, whilst specific incidents or experiences may act as primary or key traumas, the more pernicious effects of being a minority during military service were also viewed as important. In this respect, the military cultures experienced in general by the servicewomen of the past were viewed as potentially impacting the women veterans of today. This was viewed as extending beyond the nominal boundaries of MST, and included the potentially lasting consequences of operating in a hyper-masculine, all-encompassing, men-dominated, and hierarchical environment.

Policy Cover

The ENHANCE study by Combat Stress aimed to provide guidance on improving access to the best evidence-based treatment for women veterans who have experienced military sexual trauma (MST).

To do this, this study:

i. identified the treatment with the best evidence for PTSD resulting from MST.
ii. interviewed UK women veterans and analysed their experiences of mental ill health and of seeking help and support.
iii. combined these findings to inform guidance and future recommendations.

The study identified that Cognitive Processing Therapy (CPT) has the strongest evidence for treating PTSD resulting from MST in women veterans. This finding is in line with the broader National Institute for Health and Care Excellence (NICE) guidance on the use of trauma-focused therapies for the treatment of PTSD.

Women veterans participating in this study reported that although they have similar experiences to veteran men regarding seeking mental health treatment and support, they have additional complexities and needs as a result of their gender and experiences during military service. Findings of this report suggest these occur at three levels:

1. The personal level concerns women veterans' beliefs and views on mental ill health.
2. The group level specifically concerns feelings of belonging and identity within veteran and treatment environments.
3. The structural level relates to how health care providers and the wider health system are seen to respond to the needs of women veterans.

This report suggests that in order to improve access and women veterans' engagement particularly with health services, these findings should be considered across the policy, practice and research domains in a UK-specific context.

Recommendations

The following recommendations are proposed based on the evidence and findings generated from this study:

Policy

Implement an education programme to increase health care professionals' awareness of women veterans, their military service experiences, and mental health care needs.

Based on the findings in this report, this should include both specialist (e.g. veteran-specific organisations) and non-specialist health care gatekeepers (e.g. GPs).

Review the term 'veteran' for women veterans to ensure applicability and inclusion.

The findings suggest that women veterans can feel they do not identify with, are marginalised by and their experiences invalidated within the veteran space and wider discourse.

Better understand the capacity of CPT provision in clinical services and ensure the best evidenced treatment is available for women veterans who have experienced MST.

CPT is the best evidence-based recommended treatment based on the evidence presented in this report, and appropriate access is dependent on suitable clinical capacity and provision.

Health Services & Charities

Creation of care pathway options, such as women veteran only or MST-only treatment and support groups, appropriate to sensitivities of individual trauma experiences and treatment preferences.

The evidence presented suggests that women veterans, and particularly those with MST histories, may find aspects of typical treatment settings distressing, for example those dominated by specific genders or military cultures and groups.

Research & Academia

Additional research specifically applicable to MST in a UK veteran context is recommended.

This report found that the research corpus on MST prevalence, health outcomes, and treatment provision and efficacy is dominated by US-based studies, with Five Eyes colleagues such as Canada increasingly prolific.

Improve the understanding of the impacts of military service as a gender-minority, that extend beyond MST experiences.

The evidence reviewed suggests that serving as a gender-minority in the military may influence health and help-seeking behaviours as a veteran more widely, regardless of specific adverse experiences such as MST.

Chapter 1
Introduction & Background

1.1 Women veterans: research & health

The number of women serving in NATO forces has doubled since 2000, with 85% of members now allowing women to serve in all roles.[1] In the UK, all roles have been open to women since 2018. Currently, around 11% of UK military personnel are women, and it is proposed this be increased to 30% by 2030.[2] According to the most recent census, 13.6% of the veteran population of England and Wales identify as women, amounting to approximately 251,400 veterans.[3]

To date, women veterans have been comparatively underserved by both the research into, and provision of, mental health treatment, which has tended towards understanding and addressing the needs of the majority comprising of veteran men.[4] Research by Combat Stress and others has shown that women veterans may display higher prevalence of ill health, compared to veteran men. This includes symptoms of probable posttraumatic stress disorder (PTSD), anxiety and depression, physical health problems, somatisation, and loneliness.[5–7] Some of the drivers of these differences, may lie in the specific experiences of military service as a woman.

In addition to specific military stressors such as combat exposure, the military veterans of today also faced era-specific systemic stressors as the service personnel of yesterday. For example, until 1990, UK servicewomen faced automatic discharge from military service should they have become pregnant. Furthermore, despite the decriminalisation in wider society commencing from 1967 onwards, a ban on homosexuality in the armed forces continued until 2000 ('the Ban'). Those suspected or confirmed as being lesbian, gay, bisexual, or transgender (LGBT+), faced discrimination, bullying, imprisonment and dismissal from service without financial or practical support.[8] The Independent Review conducted by Lord Etherton into the service and experiences of LGBT+ veterans noted the Ban, and its enduring impact on women veterans has been particularly servere.[9]

Despite societal and legal changes, servicewomen remain a minority serving within men-dominated military environments, and gender-related stressors persist. The Defence Committee of the House of Commons' *Atherton Report*[10] highlighted the potential impact of certain aspects of military culture. The hyper-masculine environment, all-encompassing lifestyle blurring occupational and personal lives, and hierarchical Chain of Command were all cited as potentially playing a part in negatively impacting the health and safety of service personnel, and in particular minority groups such as women.

Recent research indicates this may indeed be the case. In-service adverse experiences such as disadvantage in career pathways, discharge from service on the grounds of sexuality or pregnancy, and the pernicious negative impact of being a gender minority during military service, have all been shown to associate strongly with reporting symptoms of mental ill health as a veteran.[5,8,11,12] However, one adverse experience in particular is notable for its reported prevalence amongst servicewomen: that of military sexual trauma.

1.2 Defining military sexual trauma (MST)

Currently no international consensus definition of military sexual trauma (MST) exists. The US Department for Veteran Affairs (VA) and federal law states that MST comprises:

> *psychological trauma, which in the judgement of a VA mental health professional, resulted from physical assault of a sexual nature, battery of a*

> *sexual nature, or sexual harassment which occurred while the veteran was serving on active duty, active duty training or inactive duty training.*
> (38 USC §1720D)

In this context, sexual harassment is considered to be repeated, unsolicited and threatening verbal or physical contact of sexual nature. This definition provides the basis for a Veterans Health Administration screening programme in operation since 2000. Importantly, MST is considered a stressor and not a diagnosis in and of itself.

Although the US definition tends to be widespread across international research literature, precise delineations remain sensitive to national laws and contextual definitions with individual studies.[13] For example, a meta-analysis of MST prevalence across 69 US-based studies found that a third of the studies measured rates of both harassment and assault, whilst 43 studies provided measurements of sexual assault only.[14]

Cognisant of these considerations, MST is therefore broadly operationalised across research studies as encompassing a continuum of harmful behaviours ranging from sexual harassment and bullying, to sexual assault and violence, which occur during military service and in a military context.

Furthermore, whilst the whole MST continuum has been shown to potentially result in adverse health outcomes (see 1.3), variations exist. Sexual assault has been demonstrated to result in more severe symptoms of mental ill health[15] and suicidal ideation,[16] compared to other experiences within the MST continuum.

Indeed, whilst MST impacts both servicemen and women, gender-based structural – particularly for servicewomen – discrimination could also be viewed as existing on the MST continuum alongside (and also resulting in) harassment and bullying.

1.3 Prevalence of MST

No reliable prevalence figures currently exist for the UK serving and veteran population. A study of UK women veterans conducted by Combat Stress found that 22.5% reported experiencing sexual harassment, 22.7% reported emotional bullying, and 5.1% reported sexual assault during service.[17] The *Atherton Report* stated that 62% of all respondents to their hearing said they had experienced some form of bullying, harassment and/or discrimination while serving.[10] Importantly, estimates are regarded as conservative due to high rates of suspected non-disclosure.[18]

Despite variations in definitions, across countries and studies, MST has been shown to be pervasive. In the US, a mean of 15.7% of serving and ex-serving personnel report experiencing MST, with 38.4% of women compared to 3.9% of men disclosing such experiences.[14] Although the majority of research is US-based, similar prevalence estimates have been produced for other countries. Amongst French service personnel, 36.7% of women and 17.5% of men reported experiencing MST in the previous year, with 12.6% and 3.5% respectively reporting sexual assault.[19] Lifetime MST was reported by 44.6% of women and 4.8% of men in a Canadian Armed Forces sample[20] whilst a similar proportion of Belgian servicewomen reported physical sexual harassment.[21] In the same Belgian sample, non-physical sexual harassment was reported by 64.4% and 9% reported rape over the course of their career.

The greater proportions of men across armed forces may mean that the absolute numbers of those experiencing MST across genders are equal, with research into veteran men comparatively lacking.[22] However, whilst the impact of MST on servicemen should not be diminished or ignored, women remain disproportionately the victims. Furthermore, whilst

commonalities exist, there is some evidence suggesting gender differences in both the profile of psychological outcomes secondary to MST and potential treatment responses.[23,24] Therefore, a gender-specific focus is merited.

1.4 Mental health consequences of MST

Experiences of MST are linked to an array of comorbid physical, functional, and psychological outcomes in women veterans,[7,25–27] most notably PTSD, for which MST is considered one of the leading causes amongst women veterans.[28,29] Combat Stress research with a cohort of UK women veterans found that those who experienced military sexual harassment were more than two times more likely to report PTSD symptoms as a veteran, with odds increasing still further for those who experienced military sexual assault.[17]

Sexual assault within a military context may be particularly injurious. Women veterans have been shown to be up to nine times more likely to report symptoms of PTSD if they had a history of military sexual assault.[30] Furthermore, sexual assault which took place during service has been shown to potentially lead to more severe PTSD symptoms, compared to equivalent assaults occurring pre- or post-military service.[31]

As such, sexual assault and MST more widely differ notably from comparative traumas in non-military settings in several ways. Given the unique environment of the armed forces, problematic or inappropriate behaviour can become normalised.[10] This environment is also a uniquely all-encompassing occupational setting, from which it is both impractical and impossible to escape. Thus, the likelihood of reporting experiences of MST may be diminished due a fear of negative impacts on career progression, posting location or indeed livelihood in general.[32,33] Furthermore, in addition to the violation of trust and safety inherent in sexual trauma, the impact of the military rank structure and Chain of Command, and lack of privacy additionally hinders disclosure or reporting of any MST experiences.[10,34] Indeed, an individual's relative position within the rank structure itself may contribute to the risk of experiencing MST.[17,35]

Understanding the prevalence and psychological consequences of MST is key to ensuring mental health services can appropriately meet the needs of UK women veterans. In this vein, the ENHANCE study aimed:

- to conduct a systematic review of published literature to understand and identify the best evidence-based treatment for PTSD resulting from MST in women veterans. At time of the study commencing, no reviews of this nature specifically focusing on women veterans had been published;
- to conduct in-depth interviews with women veterans with lived experience of mental health difficulties, who may or may not have sought treatment and support over their life course. Analysis of these interviews – amongst the first with UK women veterans – aimed to present themes common to the positive and negative experiences of seeking help, so that recommendations may be made for improving veteran mental health services;
- synthesise these findings to produce the recommendations detailed in this report, as well as educational materials for health care professionals working with veterans, concentrating on the needs of women veterans who had experienced MST.

Chapter 2
Study Stages & Methodology

In order to address the topic, the ENHANCE study posed three core research questions:

- What is the best quality evidence-based treatment for women veteran survivors of sexual trauma?
- What are the experiences do women veterans experiencing posttraumatic difficulties report as applied to the UK, when engaging with clinical services throughout the life course, and how might these impact help-seeking?
- How might these findings be translated into improving access to treatment for women veterans?

Accordingly, three separate but interlinked work packages were created to attend to each question (see Figure 1). Additional methodological detail is provided in the relevant chapters of this report. The ENHANCE study was conducted throughout FY2022/23.

Figure 1. *ENHANCE study work packages*

2.1 Work Package 1: Systematic review of existing literature

The systematic review aimed to aggregate and understand the current state of evidence of best practice treatments for women veteran survivors of MST. The methods and procedure for the review were informed by the PRISMA guidelines[1] and Cochrane Handbook for Systematic Reviews of Interventions v6.3.[2] The systematic review was registered and conducted in accordance with the International Prospective Register of Systematic Reviews (PROSPERO: CRD42022328711). Further details on the search strategy can be found in Chapter 3 and the Appendices.

2.2 Work Package 2: Qualitative, lived-experience study

This qualitative study aimed to extend the current nascent understanding of treatment access and engagement barriers faced by women veterans experiencing psychological difficulties. Interviews were conducted with a sample of 19 women veterans who all reported experiencing posttraumatic difficulties within the past two years.

A semi-structured interview was conducted on their experiences of mental ill health and help-seeking behaviours. This included an exploration of: their experiences of any mental health difficulties and any associated events; whether or not they have sought and received psychological interventions including their decision making processes; influencing factors and individuals on whether or not to seek help; their views of their own mental health; recollections and impressions of their treatment experiences; whether they felt the treatment they received had been beneficial and why; and any improvements they felt would have been beneficial. All participants were invited to discuss their thoughts and feelings around each topic, with interviewer prompts provided to encourage elaboration.

All data were handled in line with the Combat Stress code of conduct for research with human participants. The study was approved by King's College London Research Ethics Committee (ref: RESCM-21/22-23236). Further details on the are provided in Chapter 4 and the Appendices.

2.3 Work Package 3: Knowledge mobilisation

A training package of materials was produced, focusing on raising professional knowledge of women veterans and their experiences of MST. The package comprised a one-page infographic and guided video presentation which detailed MST-awareness information, best-evidenced treatment options, and considerations relating to women veterans and MST for professionals working with veterans. Materials were produced as a synthesis of the findings from previous work packages, and were refined in conjunction with the expert stakeholder group (see 2.4).

Dissemination of the findings and signposting to information has taken place at several international conferences throughout 2023, as well as through partnerships with UK NHS and charity veteran services, COBSEO, and the UK Psychological Trauma Society. These materials can be accessed at combatstress.org.uk/women-veterans-research.

2.4 Collaborative working & stakeholder engagement

ENHANCE was conducted in collaboration with King's Centre for Military Health Research (KCMHR), King's College London. Participants for the study in work package 2 were drawn from the membership of the Women's Royal Army Corps (WRAC) Association.

An expert stakeholder group of clinicians, those with lived experience, and third sector veteran healthcare specialists were engaged throughout the study. The stakeholder group provided feedback and input during the planning and reporting stages. Although their contributions are not presented in detail, they acted as arbiters of the educational materials and key messaging in all output materials. Accordingly, their input is referenced in Chapter 5.

Chapter 3

Work Package 1 (Systematic Review)

Evidence-based treatments for PTSD symptoms secondary to military sexual trauma in women veterans

Key Findings & Recommendations

- **Trauma-focused therapies have the strongest evidence base for efficacy in treating PTSD resulting from MST in women veterans**
- **Cognitive Processing Therapy (CPT) is currently the best-evidenced treatment method.**
- **There is emergent evidence for some non-trauma-focused interventions, in particular trauma sensitive yoga.**

It is recommended that the capacity and provision of CPT for women veterans is better understood, and access ensured to best evidence-based treatment.

3.1 Introduction

Current NICE guidance[1] indicates that trauma-focused cognitive behavioural therapies have the strongest evidence base for efficacy as first-line treatment for PTSD in adults. However, PTSD resulting from interpersonal traumas may feature more pronounced symptoms.[2,3] Interpersonal traumas, and sexual traumas in particular have also been linked to heightened feelings of shame and guilt in survivors.[4] As such, specific therapies may be more effective in treating the mental health consequences of sexual trauma.

Several psychotherapeutic interventions have been studied as treatments for PTSD and other mental health difficulties secondary to (resulting from) sexual trauma in civilian populations. Prolonged Exposure (PE), Cognitive Processing Therapy (CPT) – both considered trauma-focused therapies – have both demonstrated efficacy, as has Eye Movement Desensitisation and Reprocessing (EMDR).[5] Symptomatic improvement in these non-military populations treated with both PE and CPT has been shown to be sustained up to six years post-treatment.[6]

However, in general the efficacy of post-trauma psychotherapeutic interventions demonstrated in civilian populations is not always replicated in veteran cohorts[7] for whom dropout rates can also be higher.[8] Therefore, it is pragmatic to consider treatment efficacy within specific clinical populations.

Both veteran status and the MST continuum itself may also compound difficulties arising from traumatic experiences. A US study showed that veterans who experienced sexual assault reported more severe symptoms of anxiety, depression and PTSD compared to

non-veterans with similar assault experiences. This difference was evident regardless of the time the assault took place (i.e. in childhood or adulthood). The authors propose that veteran status may bring with it the risk of additional interpersonal traumas including combat trauma, and highlighted the role that heightened stigma around accessing mental health support (see Chapter 4).[9] Furthermore, sexual assault which took place within a military context has been shown to potentially lead to higher levels of PTSD symptoms in women veterans compared to equivalent assaults in pre- or post-military adulthood.[10] The military environment has several unique features: the influence of rank is all pervasive; reporting structures are often connected to the Chain of Command; servicemembers live and work in close proximity; and basic needs such as food and housing are dependent on continued service.

The ENHANCE stakeholder group identified that these features of the military environment were potentially negatively impactful for servicewomen experiencing the range of behaviours encompassed by MST.

Whilst interventions targeting PTSD are commonplace in veteran mental health services across the globe, the idiosyncrasies of MST as well as its heightened prevalence amongst women service personnel and veterans, necessitates that treatments are appropriate for PTSD resulting from the full range of in-service experiences.

This ENHANCE study work package aims to identify and narratively synthesise the published peer-reviewed evidence on the effectiveness of treatment approaches specifically for PTSD symptoms secondary to (resulting from) MST in women veterans.

3.2 Method

3.2.1 Search strategy

Literature searches were conducted in August 2022 of peer-reviewed publication databases. These comprised: the Cochrane Library, Embase (via Ovid), ScienceDirect, PubMed, Epistemonikos, and Web of Science Core Collection. Topic-specific collections on PsycINFO (via Ovid), PTSDpubs, and PsychPub were also used. Combination searches used a Population, Exposure, Intervention/ Comparison and Outcome (PEI/CO) formulation. Anxiety and depression were included alongside PTSD as search terms due to their clinical co-occurrence and to ensure as comprehensive initial search as possible prior to manual sift (see appx. A for search terms).

3.2.2 Eligibility criteria

To be considered for inclusion, studies were required to report treatment outcomes for PTSD symptoms secondary to MST in a cohort of women veterans. Accordingly, studies had to: clearly state the primary therapeutic intervention used; include a validated measure of PTSD symptoms; and be published in English between 1992 and 2022. There was no minimum population size.

Retrospective analyses of clinical population data were only included where it was explicitly stated that MST was the primary or index trauma from which PTSD resulted and for which treatment was sought. Studies which differentiated groups by a history of MST but did not identify MST as the primary trauma were excluded, as it could not be confidently stated that other traumas over the lifespan (for example combat trauma) resulting in PTSD were the focus for the therapeutic interventions received. Mixed-gender samples were included where the outcomes on a measure of PTSD were clearly and explicitly stratified and presented for a sub-cohort of women with PTSD secondary to MST.

Whilst all types of study design were considered, unpublished studies, theses, books, case and case-collection studies, and studies which did not present original data were excluded.

Secondary analyses were considered only if they met the aforementioned criteria, and did not replicate results of related papers. Reference lists of eligible publications were reviewed for additional material to ensure completeness. Results were initially screened based on title and abstract. Those results deemed suitable were then reviewed as full text articles to determine whether they met the inclusion criteria. Finally, those accepted for inclusion were submitted for data extraction (see appx. B for search procedure and screening).

3.2.3 Data extraction & analysis

Study characteristics and intervention data from each relevant paper were extracted and recorded. The magnitude of change in PTSD symptoms from baseline to post-treatment, and any follow-up points, was calculated using Cohen's *d*[11] on the basis of published data and were unmoderated. Positive effect sizes represent an improvement of symptoms from baseline. An effect size of 0.20 and higher is considered small, above 0.50 to be medium, and 0.80 and higher to be large. All other data were synthesised narratively.

3.2.4 Risk of bias assessment

The QualSyst risk of bias assessment framework was used to quantify study quality.[12] Quantitative studies are scored on 14 criteria, across which a final summary score ranging from 0 to 1 is calculated. A higher score is considered preferable.

3.3 Summary results

After deduplication, 998 records were screened based on title and abstract. Full text for 180 records were then retrieved and reviewed for eligibility. There were 23 reports deemed potentially eligible for inclusion. Secondary analyses or combination analyses were excluded as they did not present novel intervention impact findings. In total, 12 studies were included in the final analysis.

3.3.1 Study characteristics

Table 1 presents an overview of the key characteristics of the 12 included papers.[13–24] All studies were of US-based veteran populations, whilst Kip et al.[19] may have also included some active-duty personnel. Across all studies the mean age ranged from 41.3 to 51.3 years old, and 753 women reporting MST were included (52.26% of the total combined sample). The three studies which used mixed gender samples[14,19,21] all provided treatment outcome results for women veterans with MST histories. Four studies did not require participants to have a diagnosis of PTSD.[16,17,20,23]

3.3.2 Definitions of MST

Definitions of MST varied across studies. In four studies[14,15,21,22] MST was defined solely as sexual assault using threat or force during military service, of which two[21,22] also included witnessing sexual assault in line with diagnostic criterion A for PTSD more generally.[25] A further seven studies either explicitly used or alluded to a definition that included sexual harassment in line with official US Veteran Health Administration guidance. There was no stated clear definition of MST in one paper.[19]

3.3.3 Study design & risk of bias

QualSyst risk of bias analysis is presented in Figure 2. Summary scores ranged from 0.61 to 0.95, demonstrating average to high quality. Three studies used RCT design, in which two used a treatment control condition[18,24] and one compared two delivery modalities of the same intervention.[13] Additionally, Holder et al.[15] did not include a treatment control condition due to being a secondary analysis of larger RCT.[26] However, this larger RCT was excluded during screening as it did not meet inclusion criteria (see 3.5). Two studies were considered open trial, feasibility pilots and had population sizes of ten or fewer.[20,23] The remainder were

outcome evaluations, with a mixture of retrospective analysis of existing data and pooled or naturalistic evaluations.

3.3.4 PTSD measures

Notwithstanding differing versions over time, all studies used variations of the self-report PTSD Checklist (PCL) to measure PTSD symptomology. The military specific PCL-M was used in two studies.[15,19] In addition, half of the included studies also used the gold-standard Clinician-Administered PTSD Scale (CAPS).

3.4 Interventions studied

Across the papers, seven different primary interventions were examined (Table 2). Broadly these could be characterised as trauma-focused (Cognitive Processing Therapy; Prolonged Exposure; Accelerated Resolution Therapy), and non-trauma-focused including complimentary or alternative therapies (Skills Training in Affective and Interpersonal Regulation; Warrior Renew; Trauma-Sensitive Yoga; Guided Imagery and Music). All studies reported a reduction in mean scores on measures of PTSD symptoms.

3.4.1 Cognitive Processing Therapy (CPT)

CPT was the most widely studied, as both primary[14,15,21,22] and comparison intervention.[18,24] Three of the studies of CPT are notable for featuring outcome measures for populations of more than 100 veterans[14,21,22] and the sample sizes should be considered a strength.

Effect sizes for changes from baseline to post-treatment on the self-reported PCL measure of PTSD symptoms ranged from medium (d=0.58)[24] to large (1.50).[14,15] On the clinician-administered CAPS, the effect size was slightly greater ranging from 0.79[18] to 2.00.[21]

Notably, effectiveness of CPT was also recorded at 2 or 3-months post-treatment[14,18,24] where effect sizes from baseline remained large. The exception was for self-reported symptoms in one study which dropped to small (d=0.23),[24] although the effect size on clinician-assessed symptoms persisted as large (d=1.03). A reduction in both PCL and CAPS-assessed PTSD symptoms was observed at 6-months post-treatment, the effect sizes continued to be considered large (d=1.46 and 1.53).[15]

These reductions of 10 points or greater were also considered clinically meaningful at 3-months post-treatment for 57.1–73.7% on CAPS-5 and 25.0-34.8% on PCL-5.[18,24] Walter et al.[22] reported that 64.5% of the population no longer met diagnostic criteria for PTSD at treatment end.

However, treatment dropout rates for weekly, outpatient delivered CPT were high, ranging from 37.0%[15] to 65.2%.[18] One study examining a 7-week residential programme of CPT reported lower patient dropout of 8.7%.[21] All residential CPT treatment programmes also included adjuvant interventions such as art therapy, psychoeducation, anger management skills, elements of dialectical behavioural therapy, and wellness groups on nutrition and yoga, which the authors state are delivered through the prism of the primary therapy.[14,21,22]

3.4.2 Prolonged Exposure (PE)

The large sample size and RCT design can be considered particular strengths of the study examining PE.[13] Large effect sizes on reducing PTSD symptoms were reported when delivered both through conventional weekly in-person sessions (d=1.32) and via home-based telemedicine (d=1.04). These effect sizes remained large at both 3- and 6-months post-treatment, and there were no discernible differences between the two delivery modalities. Dropout rates in both conditions (defined as completing fewer than eight sessions) were 50.7%. It is of note that logistic problems and excessive distress caused by the treatment were the two most frequently cited reasons for dropout given.

3.4.3 Accelerated Resolution Therapy (ART)

Although the sub-sample of women veterans with MST as primary trauma was small (*n*=6), a large effect size on reduction in self-reported PTSD symptom at both post-treatment (*d*=1.64) and 3-months follow up (*d*=1.96) was reported.[19] Four of the six women veterans demonstrated clinically meaningful reductions in PTSD symptoms of 10 points or greater, although the mean score post-treatment and at 3-month follow-up remained near caseness thresholds.

3.4.4 Trauma-Sensitive Yoga (TSY)

TSY delivered as a weekly outpatient intervention was directly compared with CPT in two studies.[18,24] The use of a RCT design in both comparing TSY with CPT, and the larger sample size in Kelly et al[18] are a strength. As a result, TSY is the most robustly examined non-trauma-focused intervention. Dropout rates were lower (39.7% and 41.25%) than CPT (65.2% and 58.3%) with the difference in one study approaching significance.[18] Effect sizes for change in both self-reported and clinician-assessed PTSD symptoms were medium (*d*=0.77–0.79)[18] and large (*d*=1.34–1.70)[24] respectively at 2-weeks post-treatment, and medium to large at 3-months post-treatment (*d*=0.55–0.81; *d*=0.90–1.03). Both studies found initial symptom reduction was quicker for the TSY group, with a larger proportion demonstrating clinically significant reduction in symptoms, and a fall below caseness threshold on both PTSD measures.[24] In the larger of the two study populations, the mean change from baseline was larger for the CPT cohort.[18] Mean reductions were also considered clinically meaningful at 3-months post-treatment for 60.0–64.3% on CAPS-5 and 32.6–50.0% on PCL-5, with both studies finding TSY compared favourably with CPT in terms of outcomes.

3.4.5 Warrior Renew (WR)

Warrior Renew – an experiential-focused psychotherapy – was studied in two trials using self-selective treatment populations, without comparison conditions. WR demonstrated a large effect size (*d* = 1.14–1.49)[16,17] at post-treatment on self-reported PTSD symptoms, resulting in a clinically significant mean reduction in symptoms, with mean post-treatment scores below caseness cut-offs for veterans on the PCL and PCL-5.[16] Both studies reported a mean difference in PCL scores which exceeded the threshold for clinically meaningful change. Both the longer[16] and truncated[17] versions of the intervention found similar dropout rates of around 21%.

3.4.6 Guided Imagery and Music (GIM)

A small-scale feasibility pilot or a variation of music-based psychotherapy reported the effect size for PTSD symptom change from baseline to end of treatment as large (*d*=1.21).[20] However, the small sample size and that three of the four participants for which PCL-5 data were presented had baseline scores below caseness threshold (14-29) means that caution is merited in interpreting the results. The one veteran who exceeded the caseness threshold for PTSD symptoms, remained so at post-treatment despite a reduction in PCL-5 score of 11 points.

3.4.7 Skills Training in Affective and Interpersonal Regulation (STAIR)

In the single study of STAIR, the sample size was small (*n*=10) and participants were already receiving (unspecified) health care interventions at time of recruitment. A large pre- to post-treatment effect size on PCL scores was demonstrated for STAIR delivered via health centre-based telemedicine (*d*=1.21).[23] Statistically significant decreases in symptom change over time were also reported, with seven out of eight participants no longer meeting PTSD caseness at post-treatment.

Table 1. *Summary and characteristics of included studies*

Study	Study Design	N [a]	MST-positive women veterans (%)	Mean age (SD)	Population	MST definition	MST criterion for participation	PTSD diagnosis?
Acierno et al (2021)[13]	RCT	136	100	43.40 (11.51)	Women veterans	harassment and assault	'MST-related index event'	Yes
Christ et al (2021)[14]	Retrospective outcome evaluation	333	31.2	47.62 (10.88)	Men/Women veterans	assault	'MST as index trauma (MST-IT)'	Yes
Holder et al (2017)[15]	Retrospective analysis of RCT (sub-sample)	27	100	41.45 (11.23)	Women veterans	assault	'index trauma of MST'	Yes
Katz (2016)[16]	Naturalistic outcome evaluation (pooled)	43	100	49.47 (10.24)	Women veterans	harassment and assault	'a history of MST'	No
Katz & Sawyer (2020)[17]	Naturalistic outcome evaluation	38	100	47.63 (12.95)	Women veterans	harassment and assault	'self identification as a survivor of MST'	No
Kelly et al (2021)[18]	RCT	104	100	48.38 (11.1)	Women veterans	harassment and assault	'PTSD related to MST'	Yes
Kip et al (2015)[19]	Retrospective outcome evaluation (pooled)	113	5.3	41.3 (13.5) [c]	Men/Women civilians, serving and veterans	none given	'MST as primary trauma'	Yes
Story & Beck (2017)[20]	Open trial, feasibility pilot	5	100	49.4 (13.98)	Women veterans	harassment and assault	'veterans who had experienced MST'	No
Voelkel et al (2015)[21] [b]	Retrospective outcome evaluation	481	26.8	47.24 (11.10) [d]	Men/Women veterans	assault (experiencing or witnessing)	'MST index trauma'	Includes 'subthreshold PTSD'
Walter et al (2014)[22] [b]	Retrospective outcome evaluation	110	100	46.7 (7.74)	Women veterans	assault (experiencing or witnessing)	'index trauma of MST'	Yes
Weiss et al (2018)[23]	Open trial, feasibility pilot	10	100	51.30 (14.74)	Women veterans	harassment and assault	'positive MST screen'	No
Zaccari et al (2022)[24]	Feasibility RCT	41	100	45.0 (9.9)	Women veterans	harassment and assault	'MST as index trauma'	Yes

[a] total number of participants in study, regardless of gender, MST or treatment completion status; Mean age is for women veterans with MST histories unless otherwise stated; [b] studies had 67 subjects in common, amounting to 60.9% (Walter et al., 2014) and 51.9% (Voelkel et al., 2015) of MST-positive women. Christ et al. (2021) was from the same geographic area, and may also contain overlapping subjects but this was not clearly stated in the published work; [c] all women servicemembers and veterans; [d] total population

Figure 2. *Risk of Bias Assessment summary matrix*

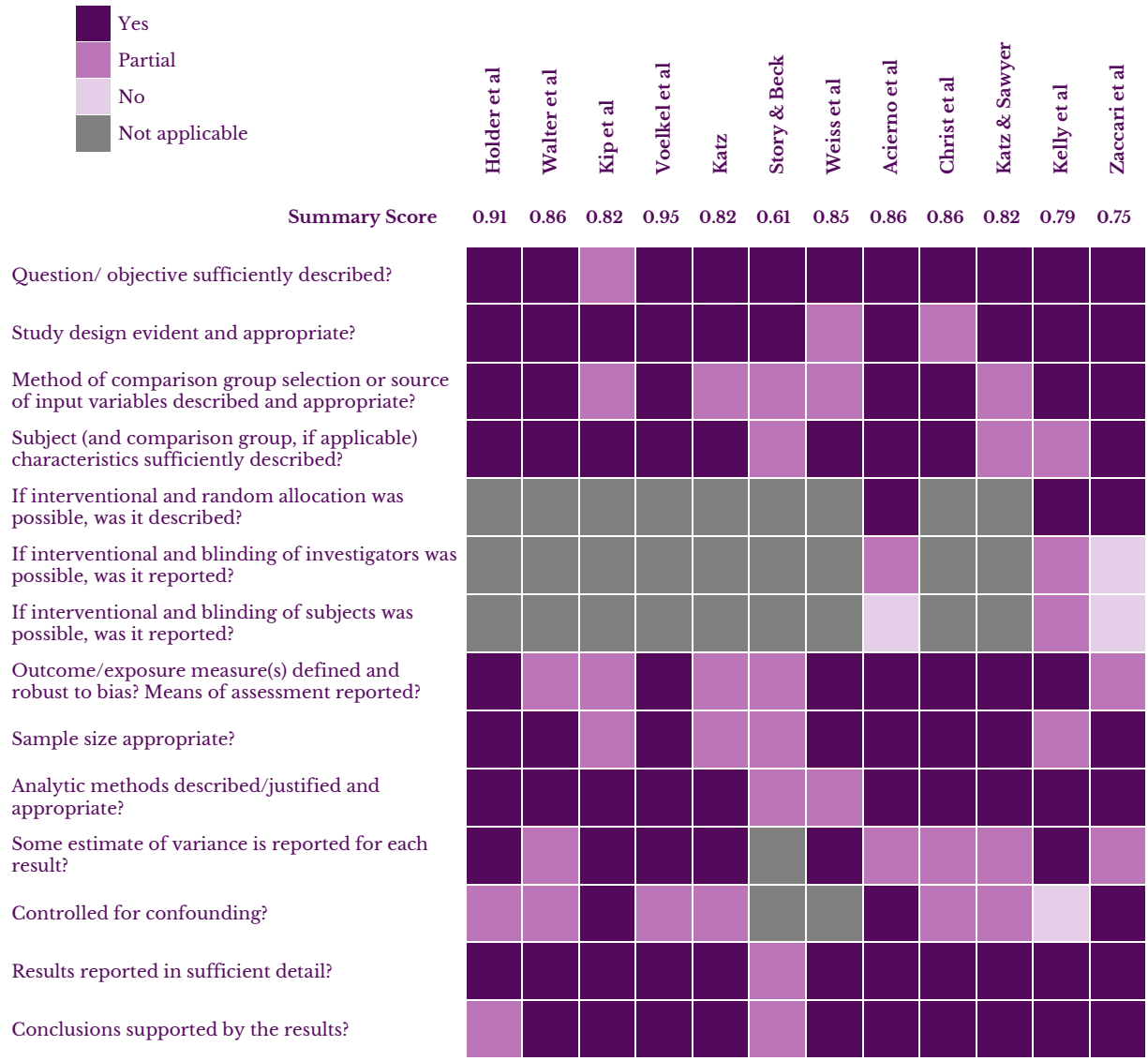


Table 2. *Included studies of effectiveness of treatment of PTSD symptoms*

Study	Treatment (and modality)	Dropout (%)	PTSD Measure	Treatment Effect size (d)		
				Baseline to Post-treatment	Baseline to 3-months post	Baseline to 6-months post
Acierno et al[13]	PE (outpatient; 10-12 sessions; individual)	50.7	PCL-5	1.32	1.28	1.17
	PE (home-based telemedicine; as above)	50.7		1.04	0.91	1.22
Christ et al[14]	CPT (7-week residential; 12+ sessions; group and individual; plus adjuvant group interventions)	-	CAPS-5	1.77	-	-
			PCL-5	1.50	-	-
Holder et al[15]	CPT (outpatient; 12 sessions weekly or twice-weekly; individual)	37.0	CAPS [a]	1.23	1.37 [b]	1.46
			PCL-M [a]	1.50	1.29 [b]	1.53
Voelkel et al[21]	CPT (7-week residential; 12+ sessions; group and individual; plus adjuvant group interventions)	8.7%	CAPS	2.00	-	-
			PCL-S	1.35	-	-
Walter et al[22]	CPT (7-week residential; 12+ sessions; group and individual; plus adjuvant group interventions)	-	CAPS [a]	1.95	-	-
			PCL-S [a]	1.17	-	-
Kelly et al[18]	CPT (outpatient; 12 weekly sessions; group)	65.2	CAPS-5	0.79 [a]	1.53	-
			PCL-5	0.66 [a]	1.07	-
	TSY (outpatient; 10 weekly sessions; group)	39.7	CAPS-5	1.70 [a]	1.50	-
			PCL-5	0.77 [a]	0.81	-
Zaccari et al[24]	CPT (outpatient; 12 weekly sessions; group)	58.3	CAPS	1.20 [c]	1.03	-
			PCL	0.58 [c]	0.23	-
	TSY (outpatient; 10 weekly sessions; group)	41.2	CAPS	1.34 [c]	0.90	-
			PCL	0.79 [c]	0.55	-
Katz[16]	WR (outpatient; 24 twice-weekly sessions; group)	20.9	PCL	1.25	-	-
			PCL-5	1.49	-	-
Katz & Sawyer[17]	WR (outpatient; 8 weekly sessions; group)	21.0	PCL-5	1.14	-	-
Kip et al[19]	ART (outpatient; 2-5 sessions; individual)	-	PCL-M	1.64	1.96	-
Story & Beck[20]	GIM (outpatient; 10 weekly sessions; individual)	-	PCL-5	1.21	-	-
Weiss et al[23]	STAIR (health centre-based telemedicine; 10 weekly sessions; individual)	-	PCL-5	1.21	-	-

ART: Accelerated Resolution Therapy; CPT: Cognitive Processing Therapy; GIM: Guided Imagery and Music; PE: Prolonged Exposure; STAIR: Skills Training in Affective and Interpersonal Regulation; TSY: Trauma-Sensitive Yoga; WR: Warrior Renew;
[a] calculated from published figures; [b] 2 months post-treatment; [c] 2 weeks post-treatment

3.5 Discussion

3.5.1 Main findings

This review aimed to examine and evaluate the effectiveness of treatments for PTSD symptoms secondary to MST in ex-serving military women. Across the studies included in this review, all seven interventions – three trauma-focused and four non-trauma-focused or complimentary – demonstrated efficacy in reducing symptoms at treatment completion. However, longitudinal efficacy beyond treatment completion was only reported for the three trauma-focused (CPT; PE; ART) and one non-trauma-focused (TSY) approaches. Whilst this review presents tentative evidence of the efficacy of the other included therapies, it cannot be stated whether their effects endure for a significant period post-treatment. Furthermore, notable differences in study design (e.g. RCT versus naturalistic evaluation), definitions of MST which informed who took part in the studies, as well as number of sessions and format of intervention delivered (e.g. residential versus outpatient; single intervention versus inclusion of adjuvant interventions) were observed (see 3.3). Such variations do not permit like-for-like comparisons nor drawing firm conclusions about comparative efficacy of the different interventions.

However, given the generally greater sample size and study quality, these findings suggest that trauma-focused therapies, in particular CPT, currently have the strongest evidence base for efficacy in reducing PTSD symptoms. Whilst PE also has a strong evidence base, the authors note that it is not routinely used in the UK. Additionally, TSY also demonstrates promising and growing evidence-base for efficacy for reducing PTSD symptoms with a lasting effect, comparative to CPT. The other interventions studied do not yet have an evidence base that can be considered strong enough to demonstrate their widespread efficacy.

3.5.2 Clinical implications

That half of the included studies included CPT is unsurprising: along with PE, it is one of the recommended gold-standard therapies for US veterans and was specifically designed for treating PTSD symptoms resulting from rape.[27] More broadly, both CPT and PE are frequently examined in RCTs of first-line interventions for PTSD (irrespective of causal trauma type) in veterans in general.[28] Given the prevalence of MST experiences, and in particular amongst women veterans, it is likely the results of these studies into treatments for veteran PTSD more broadly, add to the evidence base.

Although excluded from this review in favour of a smaller sub-analysis[15] due to a mixed-gender sample, Surís and colleagues[29] demonstrated the effectiveness of CPT in comparison to a control in the largest randomised trial of CPT for MST-related PTSD to date, in which 85% of the study population were MST-positive women veterans. When compared with a non-trauma-focused control (Present-Centered Therapy; PCT), CPT resulted in a significantly greater reduction in self-reported symptoms, with comparable effect sizes to the sub-analysis reported here. PE has been shown to be effective by Schnurr et al,[30] with greater likelihood of losing PTSD diagnosis compared to PCT, in a population sample featuring 68.3% MST-positive women veterans. It is noteworthy, that in a comparison of PE and CPT for PTSD in veterans in general, PE statistically demonstrated an advantage in PTSD symptom impact, but the two were viewed as clinically comparable.[31]

However, the elevated dropout rates in comparison with and reduced amount of clinically significant change relative to other interventions is of note.[32,33] Trauma-focused therapies may involve a degree of *in vivo* or imaginal exposure, and/or the repeated recounting of trauma narratives. Such trauma-work creates potential stress points at which distress can increase and treatment dropout potentially becomes more likely.[13,34] The reduced dropout rate demonstrated by the delivery of CPT in a residential modality[21] may indicate the benefit of alternative delivery modalities.

One possibility may be that residential treatments can facilitate more time and access to support to explore traumas, including those additional to veterans' index or most salient experiences.[35] This may be especially beneficial in women veterans who have survived MST who typically report multiple and elevated instances of lifetime traumas including childhood, repeated military and adult sexual abuse, and intimate partner violence.[31,36,37]

Additionally, residential programmes typically feature adjuvant interventions alongside the main intervention which may temper the distress caused during the core treatment. In this review, those studies in which CPT was delivered in this manner[14,21,22] all demonstrated slightly larger effect sizes than those which did not feature adjuvant treatments.[15,18,24] Whilst overinterpretation should be avoided, it possible that adjuvant psychoeducation, mindfulness, wellness groups, and elements of other interventions such as dialectical behavioural therapy may target wider aspects of the sequalae of MST.

Clinically this is of particular importance. The studies included in this review show that not all veterans with MST histories demonstrate clinically significant improvements in symptoms or fall below caseness thresholds after treatment. Relative to other index traumas, and commensurate with other experiences of sexual trauma and interpersonal violence, MST may result in heightened negative posttraumatic cognitions, and feelings of self-blame in particular.[38] Such negative cognitions have been shown to mediate the effectiveness of CPT on symptoms of PTSD in veteran populations.[39,40] Similarly, the saliency of emotional regulation difficulties in MST cohorts[41] may indicate another potential target for adjuvant treatments that may improve both specific functioning domains, and overall symptom changes.[37]

3.5.3 Research implications

Across eligible studies, there was a paucity of study designs utilising treatment comparisons and no studies measured treatment efficacy past 6-months post-treatment.

It is of note that no EMDR studies were found for this review, considering the evidence for its use in treating the consequences of sexual trauma in civilians.[6] However, ART as included in this review,[19] did feature bilateral visual stimulation as part of the intervention protocol. Similarly excluded were a number of studies of other interventions in veteran samples which included reports of MST, such as acceptance and commitment therapy[42] and reconsolidation of traumatic memories.[43] As previously mentioned, PCT – a non-trauma-focused, manualised therapy for PTSD – was used as a comparison in two excluded studies of PE[30] and CPT.[29] These studies suggest that PCT may be a viable, non-trauma-focused alternative intervention. However, these studies were not able to stratify their results by both gender and trauma type.

On that basis, the exclusions are indicative of a recurring feature in intervention studies which feature veteran samples of mixed gender and/or index traumas: namely, the small percentage of women veterans included means there is a chronic risk of any attempted statistical analysis of sub-cohorts being underpowered.[31,44] Considering the mixed evidence for both different psychopathologies and treatment responses resulting from MST compared to other traumas[26,44,45] and in women compared to men,[21,46,47] it may be prudent to focus on studying treatment efficacy specifically in focused populations, rather than attempting to disaggregate treatment responses via statistical analysis.

All the included studies in this review were of US populations and by extension the US veteran healthcare system. The pervasive demonstration of MST across different countries' militaries, indicates that there is a requirement for the efficacy of treatments to be demonstrated across differing national populations and healthcare systems.

However, for adequate international comparisons to be made, specificity and consensus is also required in the operationalisation of MST. In the included studies, MST was variously defined as experiencing miliary sexual assault, experiencing or witnessing military sexual assault, or experiencing military sexual assault or military sexual harassment. Although sexual harassment itself exists on a continuum of increasingly inappropriate and psychologically damaging behaviour which should neither be dismissed nor diminished, sexual assault by comparison has been positively and significantly associated with more severe sequalae including suicidal ideation[48] and heightened PTSD symptoms.[49] Therefore, a lack of consensus definition potentially impairs both a clear understanding of the prevalence of such traumas,[50] and how to best treat the resultant varying impact.

3.5.4 Study strengths & limitations

Care was taken to ensure the search strategy was appropriate, thorough, and followed established methodologies. However, it is possible that the returned results may not have been exhaustive, as a result of several restrictions such as the publication window and only including English-language works. Searching explicitly for sexual trauma (see appx. A), may have excluded some studies which came under remit but were categorised under other terms such as interpersonal or intimate partner violence. In addition, search strategies across different publication databases are not always directly analogous[51] and may result in the omission of relevant material. However, by using a cross-section of major databases and specialist repositories, the final corpus is reflective of the available field as observed.

The authors acknowledge that our criteria relating to mixed-gender or mixed-trauma samples and the need to identify PTSD secondary to MST in women, may be overly restrictive. Consequently, papers which may deepen the evidence base may have been excluded. Where appropriate, the authors have attempted to acknowledge these cases in the discussion section.

Finally, whilst this review focused on PTSD symptoms as the most frequent outcome of MST, the range of potential sequalae are much broader and no single intervention can be of universal efficacy.[52] Accordingly, future research into the range of outcomes secondary to MST and the associated appropriate interventions would be beneficial.

3.6 Work Package 1 conclusions

This work package identified seven different interventions, broadly dichotomised into either trauma-focused or non-trauma-focused therapies. On the balance of evidence, trauma-focused therapies (in particular Cognitive Processing Therapy and Prolonged Exposure) and non-trauma-focused Trauma-Sensitive Yoga were presented the strongest efficacy findings in treating PTSD symptoms secondary to MST in servicewomen and veterans. The reduction in symptoms in these interventions was demonstrated to persist at 6-months post-treatment.

However, variation persists in the definition of MST. Consistent operationalisation of the continuum of experiences that MST inhabits, will not only allow for better estimates of prevalence, but also allow comparative research into non-US, international veteran populations that is currently absent. Additionally, whilst all interventions included promote some degree of symptom improvement, the lack of robust and consistent follow-up measures mean efficacy conclusions are limited. Finally, a fuller understanding of the factors contributing to and potential mitigation of the comparatively high dropout rates and proportion of veterans not dropping below PTSD caseness thresholds after gold-standard trauma-focused therapies need to be explored. Allied to this is the need to further investigate the role of adjuvant treatments to target specific symptoms and functioning domains idiosyncratic to those with MST histories, which may in turn improve PTSD symptoms and overall treatment response.

Chapter 4

Work Package 2 (Qualitative Study)

The experiences of help-seeking and receiving mental health treatment by UK women veterans

Key Findings & Recommendations

- **Women veterans report gender-specific features in their experience of mental health difficulties and help-seeking, additional to those common across the veteran population. These operate at the personal belief level, the group belonging level, and the systemic care provision level.**
- **Women veterans wish to be acknowledged as unique in support and treatment provision.**
- **Women veterans perceived that health care professionals and provision do not fully understand their needs and experiences.**

The findings suggest that women veterans are distinct from veteran men and may benefit from gender-specific adaptations and pathways in care provision.

A professional education programme for health care professionals on women veterans, their service experiences, and mental health care needs is recommended.

Women veterans' identification as veterans, as well as their sense of belonging in veteran care services and group should be addressed.

4.1 Introduction

Analysis of help-seeking behaviours can aid our understanding of how mental health service provision can be best tailored to the needs of women veterans. Gender differences in help-seeking behaviours for mental health difficulties have been observed in the general population. Staiger and colleagues[1] report that for men, seeking support potentially runs contrary to internalised traditional masculinised norms around strength, success and self-reliance, and thus acted as a salient barrier. On the other hand, studies suggest that women seek support more readily than men for mental health difficulties.[2,3] Furthermore, gender-differences in coping strategies and preferences for different types of treatment have also been noted,[4] which may also impact on help-seeking behaviours.

When compared to the general public, veterans often report underutilising health services.[5] Internalised-stigma around mental ill health, poor recognition of one's need for support, perceived negative public attitudes and understanding of the military, and lack of awareness

and timely access to support services[6–9] have all been demonstrated as acting as barriers to veteran help-seeking. Compared to other disorders, these barriers are particularly acute for those with PTSD.[9] In addition, heightened symptom severity has been linked to increased stigmatising views of the self and mental ill health.[10]

Whilst extant research has been dominated by US-based populations of serving and formerly serving men,[11,12] nascent studies suggest that gender differences may also exist regarding help-seeking behaviour and interaction with health services. When compared to men, serving and ex-serving women are significantly more likely to report accessing healthcare support through formal sources such as family doctors and specialist care, rather than seeking informal help from friends and families.[13,14] Preliminary evidence from studies using online surveys has shown that whilst barriers and facilitators to accessing healthcare for women veterans mirror those found in cohorts predominantly consisting of men, women veterans may also face additional obstructive factors. These include heightened stigma around disclosing mental health difficulties, a sense of exclusion from men-dominated and orientated support services, and the lasting impact of gender-specific adversities during service.[15,16]

However, to date no in-depth interview-based qualitative studies have been conducted into the experiences of help-seeking and mental ill health in non-US women veteran cohorts. This second work package of the ENHANCE study aims to further expand the understanding of the interaction between former servicewomen and healthcare by exploring the experiences of help-seeking and treatment in UK women veterans with mental health difficulties via semi-structured interviews. Both those who have and those who have not received therapeutic or supportive interventions were interviewed.

4.2 Method

4.2.1 Participants & measures

Participants were recruited from a cohort of 750 veterans from a UK women veterans' charity, who had previously taken part in research into their experiences of military service[17] and had consented to be contacted for follow-up studies. The cohort had previously completed the PTSD Checklist for DSM-5 (PCL-5)[18] with a cut-off score of 31 and above indicating probable caseness for PTSD. A sub-cohort of 68 participants who met likely case criteria were invited via email to take part in the current study, of which a final sample of 19 women veterans took part in the study.

Participants completed an online version of the Life Events Checklist for DSM-5 (LEC-5)[19] which asks respondents to endorse exposure to any of 16 potentially traumatic experiences across their lifetime. The LEC-5 measure was modified to record whether an event was experienced pre-, during, or post-military service (see appx. C). A free text entry was provided for additional details of events not otherwise listed, and demographic information was also collected.

4.2.2 Procedure

Veterans participated in a semi-structured online or telephone interview (*M*=59 minutes, *SD*=14.9, range: 41–102), conducted by a member of the research group in 2022. Participants were reminded of the purpose of the study and were asked for their views and recollections on their experiences of mental ill health and help-seeking (see appx. D for interview schedule). Participants were provided signposting to help and support services post-interview, and received follow-up welfare communication from the interviewing researcher one-week after participation if it was deemed appropriate and/or necessary. Interviews were audio recorded and transcribed, with all identifying information removed prior to analysis. Recordings were destroyed after transcription.

4.2.3 Qualitative analysis

A Reflexive Thematic Analysis (RTA) framework was used to identify and interpret themes of shared meaning in the dataset. RTA allows for the grouping of shared meaning into superordinate themes, which may then be further delineated into sub-themes. Further details and a discussion on RTA, including the concept of thematic saturation at which point analysis is considered complete, can be found in the works of Braun and Clark.[20–22]

The themes discussed in this study specifically refer to the experiences described by women veterans in relation to their gender. Whilst the authors have used gender-related terms throughout in the text, participant quotes have been included as transcribed and also include the use of sex-related terms in which a degree of interchangeability is inferred. Participants are identified only by a number (e.g. P1) to preserve anonymity.

4.2.4 Participant characteristics

The age of participants ranged from 47 to 67 years old (*M*=57.3, *SD*=6.1), with a mean PCL-5 score of 48.7 (*SD*=11.2). The majority (57.9%; *n*=11) defined as heterosexual, with 84.2% (*n*=16) serving for four or more years. All but two participants identified as White-British. In total, around half (52.6%; *n*=10) had children, of whom most (80%; *n*=8) had become a parent after military service had ended.

Participants left military service a mean of 26.3 years (*SD*=11.0) prior to interview. In total, 89.5% (*n*=17) reported one or more traumatic experiences during military service. Participants reported experiencing a mean of 6.7 types of potentially traumatic event (mode=8; range: 0–10) in their lifetime. A mean of 4.5 types of event occurring during military service (mode=5; range: 0–8). Unwanted sexual experiences were the most commonly reported event, both during military service and over the whole life course. In total MST was reported by 73.7% (*n*=14), of which 43.9% (*n*=6) also reported being sexually assaulted whilst serving.

4.3 Qualitative findings

Participant accounts of their experiences of experiencing, accessing, and receiving help for mental ill health were divided into three distinct but interrelated and interacting superordinate themes. These in turn were each divided into sub-themes (Table 3).

4.3.1 Superordinate Theme One (ST1): Attitudes towards mental health and help-seeking

Participants' views about ill health, asking for help, and the intersection with their experiences during military service reportedly served as a barrier to seeking help. Participant P7 explained that:

> *It's quite difficult that step to seek help... [The] big hurdle is to actually mentally make that first step happen… you are dealing with people that have got their pride, they've probably been through an awful lot just to exist in the military.*

Accordingly, attitudes towards help-seeking for mental and general health concerns were further divided into the sub-themes of i) views about the self; ii) invalidation of traumatic experiences; and iii) the consequences of seeking help.

ST1 Sub-theme: Views about the self

For women participants, the military mindset is one whereby *"you just get on with it"* (P16) and any sign of illness runs contrary to these values. P5 explained that:

> *most military people will not take medicine… you don't go sick because it's seen as a signal of failure.*

Other participants talked of needing to overcome their *"pride"* (P7) and that accepting any health intervention was *"a sign of weakness"* (P5). This sense of failure could be internalised as a negative self-view. P12 expanded:

> *I was ashamed after doing 22 years in the Army, coming out and being told that I'm the best of the best… In civvy street, I was ashamed to go and ask [the doctor]. The shame of it. And a lot of soldiers have that, they're ashamed to ask for help.*

Negative self-views were also particularly salient for those with interpersonal traumas. One veteran (P2) who was sexually assaulted and harassed during their military service said *"I've blamed myself for a long time"*. They added that they didn't want *"that label"* of a diagnosis and therefore did not seek formal help because *"I didn't know what to say. I didn't know how to start the conversation"*. Similarly, other veterans felt that they had *"missed the opportunity"* (P11) or that it was *"too late"* (P4) at their age to now seek help for any mental health problems.

However, this reluctance to seek support could be overcome by healthcare professionals. For example, P6, who served for two decades and reported a complex mix of psychological and physical health needs, described a positive engagement with healthcare. She said that her civilian GP, who was a woman and was experienced in dealing with serving and ex-serving military patients, *"was able to persuade me that it wasn't weakness to go and see someone"* and that healthcare professionals *"tried to re-educate me"* in realising that a military mindset on ill health was no longer appropriate and was potentially acting as a barrier to help-seeking.

ST1 Sub-theme: Invalidation of traumatic experiences

Women participants described that the severity and legitimacy of their traumatic experiences were often minimised by both them and others. This in turn impacted their perceived worthiness of seeking and receiving help and support. Despite meeting case criteria for likely PTSD, participating veterans described their experiences of trauma as less severe or that they were not as impacted as others because they did not serve in combat roles. P9, 52-year-old who served for five years and recounted exposure to high-threat and suffering, said:

> *I feel a bit of a fraud in one respect because I didn't really see - apart from doing Bosnia - I didn't really see much action or anything like that and there are a lot of people who are far more worse off than me.*

P11 drew a similar comparison in stating *"somebody who has served in The Falklands needs help far, far more than I did"*. P14 served in conflict zones and reported physical and sexual assault during their 14 years of service. When a friend suggested they sought help for probable PTSD, they replied:

> *I was like no, no because I never think that, I suppose is it that I didn't deserve to get help. I tend to think what I went through wasn't worth it.*

This minimising effect was often connected to the veteran participants' experiences specifically as a woman in the armed forces, and reflects aspects of both superordinate themes two (woman veteran identity; ST2) and three (applicability of treatment; ST3). P1, who served in the military police recalled encountering the (erroneous) attitude of healthcare professionals and other veterans that as a woman she *"couldn't possibly have gone into combat"* and therefore her experiences were invalidated. P19 who experienced sexual harassment and a serious accident whilst serving, had her experiences belittled in a therapeutic environment by another veteran:

> *I felt really, really upset at that because I thought 'oh yes to be acknowledged by anybody of being worthy you've got to have been shot or blown up.' In some ways, I can understand why the people who have been shot or blown up might be*

> *prioritised help more than me… but [a man veteran] made me feel that I was completely insignificant, I didn't count.*

Legitimising women veteran participants' accessing of care and support was contingent on two factors. First, a recognition by both others and the veterans themselves that servicewomen were indeed exposed to combat-type traumas. Second, acknowledging and understanding that servicewomen faced what one participant (P12) characterised as military service coloured by *"verbal abuse, physical abuse, bullying, harassment, [and] victimisation"*. Accordingly, P16 said it needed to be acknowledged that *"PTSD is not just about being on the frontline, being in a war zone. PTSD can happen through… bullying"*.

Table 3. *Identified Superordinate Themes and Sub-themes*

Superordinate Theme	Sub-theme	Illustrative Quotes
1: Attitudes towards mental health and help-seeking	Views about the self	*"most military people will not take medicine … you don't go sick because it's seen as a signal of failure."*
	Invalidation of trauma experiences	*"I tend to think what I went through wasn't worth it [seeking help]."*
	Consequences of seeking help	*"if you'd have kicked up a fuss, you'd have been kicked out."*
2: Acknowledging uniqueness of women veterans	Military versus civilian	*"It's that bond that you have with somebody who is an ex-squaddie."*
	Woman veteran versus man veteran	*"It's like you are a weird entity [as a woman veteran]."*
3: Structural elements of care provision	Validation and outreach	*"[women] are falling through the net because you just seem to think that the men keep it all in but I think some of the ladies must do."*
	Informed gatekeepers to treatment	*"They [medical professionals] didn't ask [about military experiences] – because I was a woman."*
	Applicability of treatment	*"there are more military people that are not going to fit into those square boxes that you've got to neatly fit into and when it comes to females you are even less likely to fit into that square box."*

This acknowledgement of the specifics of the experience for servicewomen by others, also overlapped with the positive impact of group belonging inherent in ST2 (see 4.3.2), and a need to feel worthy of help (inherent in ST3; see 4.3.3). According to P14:

> *It was friends from the breakfast club going 'you* are *[emphasis added] worth it, you have gone through some things that guys here have not gone through' and I said to them 'it's not a competition' because it's not.*

ST1 Sub-theme: Consequences of seeking help

Help and support during service for mental health problems or in the wake of traumatic experiences typically *"wasn't really part of the equation"* (P13) or *"just wasn't offered"* (P5). Furthermore, seeking help whilst serving was not only seen as contrary to military values and mindset, but was viewed as potentially detrimental in itself. Participants stated that *"nothing in the military is totally confidential"* (P5). P17 who was *"sexually assaulted seriously twice"* during service explained that if *"you'd have kicked up a fuss, you'd have been kicked out"*. Similarly, servicewomen who were the victims of domestic violence and rape faced a lack of support from women welfare officers, and were in a position where *"I didn't know if I would have been believed"* (P14).

Such negative effects were *"more stigmatising for women as well because they'd see you as weak"* (P3) thus confirming negative gender stereotypes that servicewomen encountered during service. Indeed, P7 whose served during the 1980s confirmed that

> *for me to then acknowledge that, 'oh maybe I can't cope now because I'm just a stupid woman' kind of like cancel[s] out everything that I'd endured to get there.*

P7 noted they felt a strong need to hide any mental health difficulties as, once diagnosed, it would be impossible to conceal the fact from others as

> *they would remove your pistol from you then everybody would know that you are in a mental health thing.*

However, the association between openness and negative consequences was not limited to the time in uniform, and remained salient as a veteran. As P15 described: *"I would say no way am I going to see a psychiatrist just because of my conditioning in the Forces"*.

4.3.2 Superordinate Theme Two (ST2): Acknowledging uniqueness of women veterans

Acknowledging the uniqueness of women veterans was seen as important for participants in accessing and engaging with therapeutic interventions. P12 recounted:

> *When you speak to some of the specialists even the ones that have been involved with military people they tend to get involved with mainly the male military people… They've not experienced it from a female veteran.*

The unique needs and experiences of women veterans were captured by two sub-themes, centred on the individual's position in relation to other contrasting identities: i) military versus civilian; and ii) woman veteran versus man veteran. Women veterans were found to straddle multiple roles and histories as they *"have the normal life experiences of civilian females but we also have the male element of the going on [military] deployment"* (P12). These competing identities were bound together by a need for health services to address the distinctiveness of women veterans and counter any feelings of isolation or lack of belonging that could arise.

ST2 Sub-theme: Military versus civilian

A divergence between those with military experience and civilians was highlighted by almost all participants. *"The military family"* (P1) brings *"that sense of belonging"* (P10). Civilians – whether as close friends, health professionals, or fellow treatment recipients – were seen as not understanding or sharing the *lingua franca* of military experiences, attitudes, culture, language, and humour. As P10 who served just over four years explained:

> *If you go and talk to a veteran you've got to have some idea of what they've gone through. It's that bond that you have with somebody who is an ex-squaddie, you can sit there and you can talk all night about total nonsense.*

The desire for veteran kinship permeated experiences of treatment unrelated to experiences in military service. P16 reported attending a therapy group that included non-veterans which primarily addressed childhood adversity, and commented:

> *I think it would have been better for me if there had been other… ex-military personnel there because… there's a kind of bond.*

ST2 Sub-theme: Woman veteran versus man veteran

Whilst women veteran participants viewed themselves as separate from civilians, they also felt apart from men veterans. P18 who served for eight years including time living abroad, questioned her inclusion in the term 'veteran' specifically as a result of her gender:

> *I get a newsletter through and I thought 'I wonder if I'm a veteran?' I didn't know if I would be veteran. I thought it was just for men.*

P9 stated: *"I don't call myself a veteran… I only did five years and one tour"*. P10 echoed this sentiment and said she *"never even thought of"* using specialist services such as Op COURAGE, explaining:

> *I see myself as a veteran but I'm not a veteran. I never served in Northern Ireland, I never went to Iraq, I never went to Afghanistan. The Falklands had just finished when I joined. I was just there, I did my bit.*

Military support services were described as tailored towards and dominated by men, and a continuation of *"the old boys' network"* (P8) that was at the root of much in-service gender discrimination. P12 stated:

> *I know a lot of female veterans that are struggling with mental health and they're just being pushed to the side and the men are being taken care of and the women are just being shoved and forgotten.*

Those who did engage with veteran-specific support groups such as P3, recounted how she was viewed as *"an outsider"* at veteran peer-support groups when:

> *it's been all male and they've just all looked and kind of, not ignored me but not really known how to speak to me.*

She continued:

> *all the banter that you heard as you are coming in and you think this is going to be a good laugh it just stops as soon as you walk in. It's like you are a weird entity.*

Although a military environment could foster a sense of belonging, a men-dominated veteran milieu could not only feel isolating, but also risk being potentially harmful or exacerbate distress, especially when the consequences of gender-based violence and discrimination were being discussed. P2 who experienced sexual assault and harassment during military service, reported that she *"wouldn't want to talk to a man about it I don't think… Especially if they are ex-Forces"*. Similarly, P1 who reported sexual harassment and homophobic bullying in the armed forces, said of men-dominated veteran peer support groups:

> *I was the only woman there and it felt unsafe. It wasn't unsafe, but for me it was taking me back into an environment where I had to hide who I was again.*

4.3.3 Superordinate Theme Three (ST3): Structural elements of care provision

The final superordinate theme concerns the structural and systemic elements to accessing and engaging with healthcare and support which P8 summed up as *"right place, right time, right person to talk to"*. Whilst distinct from the internal attitudes and beliefs in ST1 (see 4.3.1), and the need for belonging in ST2 (see 4.3.2), this third superordinate theme interacted with the other themes to influence the perceived success or otherwise of care

provision. Participants highlighted three sub-themes: i) validation and outreach; ii) the importance of informed gatekeepers to accessing treatment; iii) the need for treatment to feel applicable both in terms of a successful treatment modality and their specific needs as women veterans.

ST3 Sub-theme: Validation and outreach

Veterans who both had and hadn't accessed psychological intervention spoke of the difficulties when *"the onus always seems to be that you've got to go somewhere to ask for help, but if you are suffering with mental health, it's not easy to go and ask for help"* (P15) and that there was a need for *"proactive"* outreach to women veterans (P15). P11 explained:

> *I know the decision is ultimately mine but I think if [healthcare providers] were a bit more 'look you really need to talk to me again and tell me to my face… why don't you ring us back and we'll talk again and see how you are getting on' and set a date and time for that call rather than leave it up to me because I know for a fact that I'm going to walk away.*

The effectiveness of being proactively guided or prompted into treatment was echoed by P9 who admitted that *"I'm glad that the doctor gave me the boot up the backside because I needed it,"* whilst P8 said she accessed help in the first instance *"because it was suggested to me"*.

The need for outreach was seen as particularly pertinent to women. As expressed in ST2 (see 4.3.2), veteran support and care services were viewed as being something tailored for men and thus this barrier needed to be overcome. P4 expanded that *"men just seem to think it's a given a woman will go and get their own help"* and as a result *"they are falling through the net because you just seem to think that the men keep it all in but I think some of the ladies must do."* Furthermore, in having healthcare services reach out to women veterans, their trauma exposure and subsequent psychological difficulties are recognised and validated by those in a position to offer help, as described in ST1 (see 4.3.1).

However, proactive outreach needed to be tempered. For P8, a large number of veterans' charities and organisations can mean *"there are too many things available maybe… people are swamped and not really knowing where to go"*. Another veteran remarked that *"I had that many people ringing me I don't even know what bloody day it was half the time"* (P9).

ST3 Sub-theme: Informed gatekeepers to treatment

Participating veterans reported the importance of the gatekeeper role played by frontline health professionals. Respondents such as P18 recalled that they *"had to really bang on my [doctor's] desk and say I need help"*. P12 stated:

> *these professionals that are supposed to know about mental health they haven't got a clue about soldiers' mental health because what affects a civilian for their mental health issues is not the same for a military person.*

Thus, military-informed or military-experienced GPs and primary care staff were viewed as *"very supportive"* (P10) or *"amazing"* (P3) in the successful provision of support and accessing of health services.

Furthermore, women veterans faced the challenge of being what P10 termed *"a hidden community"* on account of their minority status and lack of professional knowledge about their very existence. P17 recounted that:

> *Nobody at any point looked down at my notes and said 'you served in the Army, how was that for you?' Not at all. I could have had [posttraumatic] stress and nobody would have known. They didn't ask – because I was a woman.*

P1 felt dismissed by her GP as just a *"depressed woman, has children, probably struggling that way"* rather than a veteran with potentially complex needs. Such experiences furthered the invalidation of trauma or military service for women veterans as a result of their gender in ST1 (see 4.3.1). In addition, this reinforced the feeling of being separate from the (men) veteran archetype more often catered for, as described in ST2 (see 4.3.2).

ST3 Sub-theme: Applicability of treatment.

The applicability of the psychological treatment itself was commented on, in terms of both treatment modality and content. Negative experiences of treatment were associated with therapy being seen as a *"tick-box exercise"* (P1), or too time-limited. Veterans who reported a successful engagement with treatment, spoke of the importance of being given time and space to talk. Making a connection with their therapist was important. Care was viewed as being personalised when perceived as going beyond the expected norm, such as when *"[the therapist] kept me on longer than she should have"* (P6) or being in receipt of *"extra sessions as well just to help me"* (P12).

The experiences of harassment, isolation and bullying when invalidated, were seen as salient in ST1 (see 4.3.1), and were part of setting women veterans apart from their men counterparts in ST2 (see 4.3.2). These experiences were also relevant for treatment that needed to address gender-specific experiences in ST3:

> *[Mental health professionals] they've not experienced the military female. Some of them have got experience of veterans but they're all males so they don't understand the difficulties that female veterans have gone through in comparison to their male colleagues.* (P12)

In addition, women veterans may have gender-specific needs that need acknowledged, that sit outside yet interact with, their experiences as servicewomen. P7 highlighted their experience of PTSD combining with peri-menopausal symptoms that required bespoke intervention:

> *when [PTSD] coincides, for me I think the menopause lowered my defences… all the walls [women have] built up to get them through the service life… they might crumble when they start hitting that menopause… and the whole thing will be mixed.*

P5 echoed the need for women's holistic health to be specifically acknowledged in psychological interventions when she

> *thought maybe my injuries and the shock had affected my fertility, which might not necessarily be the same in mental thoughts as a man.*

However, participants counselled against being seen only through a military-coloured lens. P3 stated of an unsuccessful engagement with healthcare that

> *they tend to put everything down to my military service and I know a lot of it wasn't just my military service. I had a lot going on.*

P11 added: *"I said from the word go that PTSD is not from my military time, it's from what's happened to me since. But the military gets dragged into it"*. Whilst specialist military services were seen as a good thing, personalised therapy reflecting on the whole life course of the individual was seen as particularly desirable. Specialist services focusing on single diagnoses or categories of experience such as combat-related trauma was seen as potentially exclusionary, especially for women veterans:

> *I think there are more military people that are not going to fit into those square boxes that you've got to neatly fit into and when it comes to females you are even less likely to fit into that square box.* (P19)

4.4 Discussion

This work package explored the experiences of help-seeking and receiving support from a cohort of UK women veterans for the first time via in-depth interviews. The findings coalesced around three superordinate themes which encompassed both positive and negative experiences: attitudes towards mental health and help-seeking; acknowledging the uniqueness of women veterans; and structural elements of care provision. Whilst the study did not explicitly focus on barriers and facilitators to treatment so as to fully encapsulate the participants' experiences, the findings of this study are commensurate with much of the existing literature on veteran help-seeking. However, they also diverge from and add to the existing research literature.

4.4.1 The importance of attitudes to help-seeking

A meta-analysis by Randles and Finnegan[12] found that stigma, military-nurtured stoicism and self-reliance, practical difficulties accessing support, and a need for greater military understanding amongst healthcare staff all act as significant barriers to help-seeking by veterans. The centrality of stigma was further expanded by Coleman and colleagues[7] who found the concept to be a multi-dimensional construct. This encompassed key themes of non-disclosure, individual beliefs about mental health, anticipated and personal experiences of stigma, concerns about one's career, and other factors influencing help-seeking. As such, all themes are reflected in the current findings.

Whilst the need to overcome internalised stigmatising views on mental ill health were evident in the present study, the concept of public stigma – namely perceived negative views of those with mental health problems – was less evident.[9] Although fears around a lack of confidentiality, negative career outcomes, and disadvantageous treatment in a military context persisted into life as a veteran, there was no mention of participants believing others may hold a negative perception of veterans with mental ill health, once outside the military environment. Significant strides have been made in correcting negative views about both veterans and mental health, both within a military context and in wider society. Therefore, it is possible that respondents are viewing their experiences of help-seeking in a more broadly understanding contemporary context.

4.4.2 The othering of women veterans

This findings from this work package demonstrate that women veterans experience additional barriers to help-seeking in the individual, provision and systemic domains, comparable to those of other minority groups.[23] In comparison to the wider veteran majority dominated by men,[8] this study demonstrated that women veterans uniquely report the addition of cross-domain gender-specific discrimination. Specifically this related to not identifying as a veteran, not being recognised by others as a veteran and being treated differently by frontline professionals, or dealing with the psychological or learnt behavioural consequences of in-service discrimination.[16] The finding of ENHANCE work package 2 showed that women veterans potentially felt 'othered' in veterans' groups (ST2) and had their traumatic experiences minimised (ST1).

Furthermore, although women veterans have been found to be more likely to access formal support than men,[13] such support was often found to be non-veteran specific, with general health services preferred.[15] Service practitioners have themselves reported that veteran services are regarded as both men-dominated and focused,[24] thus this preference may be based on implicit and explicit beliefs and choices. A sense of exclusion from men-centric veteran services may lead to an implicit belief amongst women veterans that such services are not for them, or that their traumatic experiences are minimised and consequently viewed as less deserving of treatment. The reported invalidation or denial of their traumatic experiences from others could act as a disincentive to accessing treatment. Hence why women veterans looked positively on both being guided – or indeed pushed – into seeking

help by informed gatekeepers, and proactive outreach from health services (ST3). Such a desire could also be seen as reflective of the generalised finding that veterans tend to wait until the moment of health crisis before seeking help and support,[25] thus the perceived need for promoting early engagement and intervention. For others, it may be an explicit choice not to engage with veteran-specific services, particularly women who have experienced sexual traumas in which the perpetrators are overwhelmingly men, in positions of authority, and military. Thus, a need for further provision and examination of women-only treatment environments, or alternative therapeutic delivery such as telemedicine in order to overcome such systemic barriers can be inferred.[26] Furthermore, the need to further explore gender-based differences in treatment access and delivery has implications for help-seeking in other men-dominated and masculinised environments such as the police, fire and other frontline services.[27–29]

4.4.3 The need for bespoke treatment

It is of note that women participants commented widely on the need for care tailored to their needs as both veterans *and* women, and the perceived limitations of care that was overly focused on their time in the military to the detriment of their pre- and post-service life. Comorbidity and complexity in veterans is the norm.[30] For example, both men and women veterans demonstrate a higher prevalence of adverse childhood experiences compared to civilians,[31,32] with multiple life course traumas producing poorer psychological outcomes.[33] More widely, a study of US veteran men being treated for military-related PTSD found that 90% of the sample also reported trauma that was non-military in nature, with childhood abuse, adult sexual trauma and post-military physical assault all significantly associated with PTSD symptom severity.[34]

Such findings may indicate an ongoing challenge for veteran-specific healthcare services. Whilst the mechanisms for engaging with specialist veteran healthcare is context and country dependent, access to specialist veteran care is frequently contingent on index traumas that are directly attributable to military service. These traumas in turn are then the target for veteran-specific treatment. Thus, further investigation may be required into the merits and practicalities of a shift from *veteran-specific* to *veteran-informed* mental health service provision, particularly delivered within existing mainstream healthcare. In this respect, rather than veteran treatment taking place in specialist silos, the latter position is orientated towards considering a whole life course perspective on trauma. This perspective is viewed through a lens coloured by an awareness of the experiences, clinical presentation and treatment responses idiosyncratic to veterans.

4.4.4 Study strengths & limitations

The study employed a cross-sectional design and used a convenience sample drawn from the membership of a single, Army-only, veteran association. It should be noted that this association is not offering clinical or social welfare services, rather its purpose is to connect women veterans post-service. As such, the sample is more reflective of a community, rather than clinical, population. Accordingly, the participating cohort is not necessarily representative in age or military experience of the wider UK women veteran population. Indeed, the service experiences of women in the UK armed forces markedly differs in several aspects compared to more recent times. Notably, 42.1% (*n*=8) of the sample identified as LGBT+ with many served during the ‘gay ban’, as well as the prohibition of pregnancy during military service. Nonetheless, the military and life experiences described by the participants are viewed as broadly indicative of the range expected to be found in the veteran population of today, the majority of whom are over 65 years of age.[35]

Traumatic experiences as captured by the LEC-5 were most probably underreported, as selecting multiple incidences was not possible in the questionnaire. However, this study did not focus on the individual types of or most salient traumatic experiences *per se*,

although future research into the specificities of trauma histories and salient factors in treatment experiences would be welcomed. In addition, the PCL-5 scores from which eligibility was determined were gathered two years previously and may not reflect the current level of symptomology. However, these scores were not seen as a *de facto* diagnosis, rather they were indicative of the likelihood that experiencing psychological difficulties and entering mental health treatment would have been a possibility. Whilst acknowledging these limitations, the study provides a qualitative snapshot of the experiences of a cohort of women veterans whose voices and experiences often go unheard. This snapshot is offered as a basis on which themes can be explored in future research, and as such no claims of extensive wider generalisability are made. Indeed, the applicability of the identified themes to women veterans of other demographic profiles and national contexts, as well as how they interlink with specific experiences of veteran mental health service quality and provision, would merit further research.

4.5 Work Package 2 conclusions

This work package specifically explored in depth the experiences of help-seeking in a sample of UK women veterans who all presented with symptoms indicative of probable PTSD.

In addition to the established personal, treatment provision, and structural challenges to accessing care faced by veterans in general, women veterans reported gender-based idiosyncrasies that cut across all domains. As such, participants identified the role of women veteran-specific personal attitudes to mental health, views on traumatic experiences and the consequences of help-seeking that impacted pro-engagement behaviours.

Similarly, the positive influence of treatment environments in both women and veteran milieus were identified, as well as the positive role played by increased awareness of women veteran-specific needs amongst healthcare gatekeepers for appropriate pathways into treatment.

Finally, the need for treatment itself to adequately fit the whole life course experience of women veterans was explored. Consequently, delivering treatment in veteran-informed, rather than veteran-specific contexts may be an area for further exploration.

These findings can be used to inform future care provision and access to ensure that the servicewomen of the past receive the most appropriate and effective care as the veterans of today.

Chapter 5
Work Package 3 (Knowledge Mobilisation)
Preliminary communication of findings

Key Findings & Recommendations

- **The presented evidence suggests that education programmes on women veterans and MST are well-received.**
- **The corpus of published knowledge of women veterans and MST is dominated by US-based studies.**

Additional knowledge mobilisation for professionals working with women veterans, including those with histories of MST, is required and likely to be beneficial.

Further research and knowledge mobilisation work specific to the UK veteran context is required.

5.1 Introduction

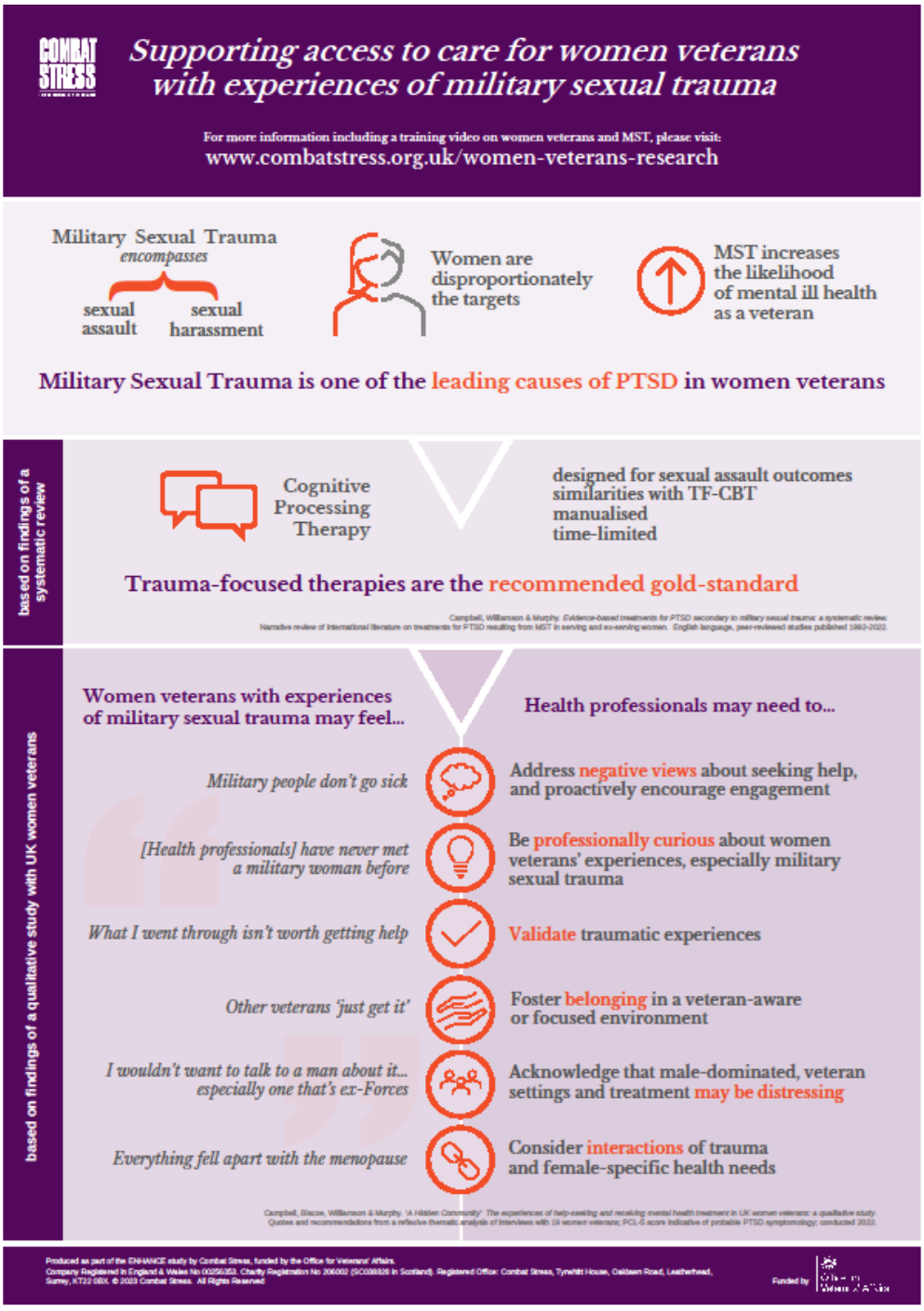
Knowledge mobilisation can be defined as the optimisation of information and understanding gained through research,[1] with effectiveness judged when research findings are deemed 'useable' and of benefit to wider society.[2] In the context of ENHANCE, work packages 1 and 2 produced novel findings regarding best-evidenced treatment and the experiences of women veterans with mental health difficulties, respectively. In addition, areas for future positive action were identified. In particular, sub-theme 3 of work package 2 (see 4.3.3) explicitly highlighted the importance of knowledge and capacity building amongst health care professionals regarding women veterans, their experiences and their needs. To this end, a number of outputs were created, targeting specific audiences.

5.2 MST & treatment infographic

The key findings from work packages 1 and 2 were synthesised and presented as an easy to follow, one-page, A4-sized infographic (Figure 3). The infographic is split into three sections: i) background information about MST and its consequences; ii) advice that trauma-focused therapies are the recommended gold-standard treatments, and in particular CPT; and iii) example statements of beliefs that may be expressed by women veterans with MST histories, and the potential actions healthcare professionals may wish to enact in response.

The infographic was made available on combatstress.org.uk/women-veterans-research for download and signposted to during any dissemination or training events (see 5.4)

Figure 3. *Infographic for professionals working with women veterans*



5.3 Guided video presentation

A 25-minute narrated graphic presentation was produced (Figure 4). Aimed at health care professionals and those working with veterans, it provided greater depth than the infographic and aimed to provide a knowledge base for veteran-aware practice in line with the findings of work packages 1 and 2. The video provided: i) background information on women veterans in the UK armed forces; ii) the international knowledge base on MST prevalence and consequences; iii) an overview of the ENHANCE study; iv) an overview of the efficacy and structure of CPT as the recommended evidence-based intervention; v) the key superordinate themes with example quotes from work package 2; and vi) a set of considerations for professionals working with women veterans.

It was embedded on the Combat Stress webpage detailed in 5.2 and formed part of trial educational packages made available to both Combat Stress staff and external partners (see 5.4).

Figure 4. Example frames from guided video presentation

5.4 Training dissemination

Although the delivery of educational or training sessions was not within the original scope of the ENHANCE study, the materials detailed in 5.2 and 5.3 have been adopted by the Combat Stress Learning and Development team in both the development and delivery of online short courses. These courses have been piloted with Combat Stress staff, and some external partners from 80 UK organisations and charities working with veterans who have access to the materials. These partners are engaged through Combat Stress's education series delivered as part of the Veterans' People, Pathways and Places programme (VPPP).

Specifically, the findings informed a VPPP-facilitated tele-seminar for external partners on the topic of designing gender-sensitive veterans services. These interactive sessions are designed to stimulate discussion and further thought, rather than providing concrete guidance. The 60-minute pilot seminar attracted 42 attendees.

Whilst the pilot dissemination of training materials was modest in scale, initial feedback was overwhelmingly positive (Table 4) and illustrates both the need and desire for increased knowledge.

Table 4. *Feedback on women veteran and MST training pilot*

"Incredibly interesting. Will inform how we deliver our services and reiterates the need to treat everyone as a whole person."
"Useful content. I'd be interested to know how widely this and other research is going be able to inform veteran, spousal and dependent support across the whole realm – both in statutory and third sector bodies. It's heartening to see services and research into Veteran issues though - thank you."
"Very enlightening. Some very interesting points regarding female veterans. Thanks for a great session today."
"An interesting topic delivered by [Combat Stress]. I learnt lots of facts and information that I was not aware of. I can use this in my current role."

5.5 Academic dissemination

Both work packages 1 and 2 identified a paucity of research across the range of questions posed by ENHANCE, and specifically from non-US context. Combat Stress is committed to enhancing the international academic corpus on veteran mental health and evidence-based treatment.

Two manuscripts have been submitted to respected international peer-reviewed academic journals. At time of this report's publication, the manuscript resulting from work package 2 has been accepted for publication,[1] and the manuscript resulting from work package 1 is currently in the peer-review process.[2]

In addition, to date the findings have also been presented at a number of national and international academic conferences,[3–5] as well as informing collaborative discussions including with Five Eyes and NATO partners.

5.6 Future steps

The need for, and benefits of, increased professional awareness of women veterans' needs and experiences (including MST) were clearly identified by veteran participants in work package 2. As such, the creation of education materials that operationalised the knowledge gained by the ENHANCE study are viewed as a step towards this.

The pilot dissemination of these materials, and associated training sessions, is on a consciously limited scale. However, the positive feedback garnered signifies two key areas for future work. First, the interest expressed by training participants already operating in the veteran sphere demonstrates the capacity for knowledge gaps to be filled amongst those who will already possess comparatively specialist knowledge. Secondly, such materials are well-received with a desire from participants to translate and operationalise these findings into productive change in veterans' services. The findings from ENHANCE have specifically identified a need for knowledge mobilisation to target *all* those who may have professional contact with veterans, and not just those operating within specific or specialist services.

To this end, there is a need and opportunity to translate the findings from the ENHANCE study into practice through a combination of: i) the development and wider dissemination of professional education and training on MST awareness and treatment guidance resulting from the study; and ii) an investigation into clinical capacity for the provision of CPT as a recommended treatment for the consequences of MST may be increased.

Whilst the ENHANCE study focused on improving access to care for women veterans with experiences of MST, findings concerning the experience of women veterans in a more general sense were also evident and included in the knowledge mobilisation materials (see Chapter 5). Specifically, feelings of powerlessness and internalised stigma were reported by women veterans and endorsed by our expert stakeholder group, regardless of whether or not MST had been experienced (see 6.4). In light of this, future professional education should ideally aim to encompass the range of potential consequences of military service for women beyond MST, and further exploration of how best to meet these clinical needs is required.

Chapter 6
Synthesis of Evidence

Key Findings & Recommendations

- **Serving as a gender-minority in the military may influence health and help-seeking behaviours as a veteran more widely, regardless of the particular impacts of specific experiences such as MST .**

An improved understanding is recommended of the impacts of military service as a gender-minority, that extend beyond MST experiences.

In this concluding chapter, the findings from the ENHANCE work packages are narratively synthesised, along with contributions from the expert stakeholder group, in line with the stated aim of improving access to evidence-based treatment for women veteran survivors of military sexual trauma. Research into UK women veterans is comparatively nascent, therefore there is a risk of over extrapolation from the findings of discreet studies to the wider national veteran population. Nonetheless, this synthesis aims to provide an indication of the most salient features that the authors believe may have utility in informing future action contributing to the improvement of mental health care access for women veterans.

6.1 Treating the consequences of MST

This report concludes that the balance of published efficacy evidence is weighted towards trauma-focused therapies for PTSD secondary to MST in women veterans. This finding is in line with the NICE guidelines for the treatment of PTSD general.[1] Cognitive Processing Therapy (CPT) in particular appears to have one of the strongest evidence bases. Care should be taken to note that all the published treatment evidence in this report originated from the US, where CPT is a recommended first-line treatment for those with MST histories.

Whilst CPT shares a number of features with other trauma-focused PTSD therapies such as Prolonged Exposure and Trauma-Focused Cognitive Behavioural Therapy,[2] it was originally designed as a treatment for survivors of sexual assault and rape. Whilst it has been shown to be effective in treating the symptoms of PTSD resulting from a range of traumatic experiences, the focus in CPT on safety, trust, power, control, esteem and intimacy are seen as particularly relevant to interpersonal traumas such as sexual violence.[3] In a UK veteran mental health context, improving access to CPT is dependent on both clinical capability and capacity building amongst health professionals, and the establishment of clear referral and care pathways for those in need of interventions for PTSD secondary to MST.

However, trauma-focused therapies are not without their challenges, and typically result in comparatively high levels of veteran drop out – potentially due to emotional distress.[4,5] It is the authors' view that it is partly in answer to this that non-trauma-focused therapies – such

as Trauma-Sensitive Yoga – are offered as an alternative, and for which there is emerging evidence of efficacy.

It is possible that different delivery modalities for trauma-focused therapies (for example residential treatment versus outpatient appointments, or single versus combination therapy programmes) may also serve as mitigation to dropout. It is noteworthy that residential programmes of trauma-focused therapy may also feature additional and concurrent non-trauma-focused interventions, such as yoga and mindfulness. However, an examination of the impact of treatment modalities is beyond the scope of this study.

6.2 Improving the understanding of MST

The ubiquity of experiences on the MST continuum amongst women veterans has been clearly evidenced from international studies as detailed in this report. Whilst the international breadth of published literature is growing, the corpus is dominated by US research and practice. Consequently, the authors offer a number of observations made during the course of the project in relation to the UK understanding of MST and how this related to both the veteran research and treatment landscapes.

Further investigation into the prevalence of MST specifically in UK veterans could aid an understanding of need as translated to service planning. A universal screening programme akin to that offered by the Veterans Health Administration in the US may not be practically translatable to the UK health system. However, a clearer indication of prevalence of MST could be achieved through knowledge mobilisation and increased recording of MST amongst healthcare professionals, in both specialist veteran and general primary care such as GPs.

An understanding of MST prevalence as encountered in healthcare settings (for example during GP appointments) may also afford a fuller profile of the range of resultant health problems that extends beyond PTSD. Depression, symptoms of anxiety, poorer parent-infant bonding, physical pain, and increased social isolation have all been shown to be associated with experiencing MST.[6–9] A deeper knowledge of the health consequences may in turn further aid appropriate service provision.

The lack of a consensus definition of MST is worthy of acknowledgement[10] and contributes to ongoing academic challenges. For example, by making international prevalence comparisons difficult. In a UK-specific context, the lack of definition may also contribute to the view that experiences of MST and their consequences remain unacknowledged, in the view of our expert stakeholder group. The debate raised by our stakeholders concerning their view of the need for institutional acknowledgement and acceptance of the academically accepted term ‘military sexual trauma’ falls outside the remit of this study. So too, the relationship with other related experiences that can take place within a military context, such as intimate partner violence and abuse.[11] However, it is of note that our expert stakeholders reported that investment in projects focusing on MST (including ENHANCE) can potentially serve as important validation of the existence and impact of MST experiences amongst women veterans, at a *systemic* level.

By viewing MST as a continuum of experiences including harassment, bullying and assault, all potentially with adverse psychological outcomes, the specificity of interventions should be considered. This report has detailed that research shows mental health outcomes may vary depending on what type of MST experience has been encountered, with sexual assaults typically resulting in the most pronounced difficulties.[12] Whilst CPT and other trauma focused therapies may be most appropriate for MST experiences of sexual violence and assault, the authors suggest that further work is required to understand interventions

best suited to experiences that may sit on other parts of the MST continuum which result in PTSD, such as bullying and harassment (see 6.4).

6.3 Improving care access

The findings from the analysis of lived experience of women veterans contributing to this report, demonstrate several areas of focus that may be of interest to health professionals and policy makers seeking to address questions of access at the individual, group, and systemic or structural levels.

In the first instance, established beliefs of women veterans about the self, mental health and help-seeking should be acknowledged and addressed. Whilst destigmatising initiatives challenging beliefs that can act as barriers to seeking help may have some positive impact,[13] they may also unduly put the onus on the veterans who already report a significant burden due to mental health difficulties. Alternatively, positive action including outreach by health professionals that reinforces help-seeking as positive, and mental health difficulties as worthy of support may also prove effective in improving access and challenging negative beliefs. These actions may help counter engrained behaviours and beliefs which discourage seeking support, fostered during military service and persist into veteran life.

Secondly, and in line with veterans in general, the need for belonging within treatment settings is reported as being of importance. Whilst a military-informed or specific environment was viewed more favourably than a civilian-dominated setting, women veterans may also feel isolated in a men-dominated, veteran treatment service. This is particularly noteworthy for those who have experienced MST where the perpetrator is most likely to have been a military man. In this respect, a choice of treatment environments such as women-only environments, or those specific to veterans with MST experiences may be beneficial to a woman veteran accessing treatment. Indeed, whilst treatment preferences are idiosyncratic, research suggests that both men and women veterans with histories of MST seem to show a preference towards engagement with women therapists.[14] The ability for the veteran to actively choose the setting most conducive to their needs, may also be important to foster feelings of agency and control where they have previously been impacted by experiences of MST. More generally, women veterans may not identify with the term veteran at all, which may further barriers to engagement with veteran-badged service.

Finally, the systemic and more practically themed experiences of participating women veterans provide an indication of where action to improve access could be taken. As previously stated (Chapter 5), knowledge mobilisation for healthcare professionals will help provide needed validation of adverse experiences encountered by women veterans during service, which may positively influence help-seeking.

Such education will also ensure that gatekeepers to treatment and specialist veteran care providers are equipped to manage women veterans' experiences. Furthermore, it will also increase the *perception* that care providers understand women veterans' experiences and are thus able to be approached. As such, this increased knowledge could encompass an understanding of the needs and experiences of women veterans, feeling empowered to be professionally curious about these experiences, and being aware of appropriate onward care pathways.

ENHANCE participants reported that where healthcare professionals did have an understanding of veterans' needs, this tended to be applicable to veteran men and not women. In addition, there is the need for a better understanding of health interactions, specifically MST and concerns around fertility and menopause that may be encountered for veteran women.

6.4 Beyond MST

The ENHANCE study specifically focused on MST, PTSD as a consequence of MST, and how the needs of women veterans may be better met. However, women veterans report a range of experiences and health outcomes (see Chapter 1) beyond MST and MST-related PTSD. Indeed, the experiences of women veterans who reported mental health difficulties in general (see Chapter 4) were reported throughout the study. The participating women veterans reported being conditioned to hide, minimise, or feeling unable to address their experiences and difficulties during military service (see 4.3.1). This point was echoed by our stakeholder group who referred to the potential impact of serving as a gender minority in the military. Feelings of disempowerment, shame and internalised stigma were reported by stakeholders as being a common result of military service as a woman. Whilst it was acknowledged that this may not always lead *directly* to mental health difficulties as a veteran, it was commented that these feelings may permeate and influence beliefs and behaviours during and after military service. For example, internalised stigma and being conditioned to keep quiet (see 4.3.1) may negatively impact on women veterans attending routine health appointments. Similarly, feelings of mistrust and shame may hinder the development of patient-clinician therapeutic relationships central to psychological treatment, regardless of the origin of the mental health difficulties faced. These 'erosive' factors are not traditionally addressed by gold-standard psychological treatments, particularly when they are not a central feature of the presenting mental health difficulty.

In this respect, the authors contend that the potentially pernicious impacts of military service as a minority and their effect on help-seeking and treatment engagement as a veteran, merit further investigation. Specifically, women veterans' mental health care needs more widely can be addressed by exploring what positive action could be taken to address these erosive factors by means of additional or adjuvant interventions delivered alongside existing treatments.

6.5 Conclusions

Whilst these considerations are not exhaustive, they represent an indication of the areas of focus for improving access to evidence-based treatments. There is a good evidence base for trauma-focused therapies in the treatment of PTSD secondary to MST, specifically CPT. In this regard, future attention may wish to be focused on increasing clinical capability and capacity in line with this evidence. However, attention on understanding consequences of MST other than PTSD, and how best to treat them, is merited.

Research into MST in the UK-context is comparatively nascent, and the evidence base can be grown. Several areas for future work have been highlighted, and these will help ensure that the corpus is applicable to the UK veteran community and mental health service provision.

Finally, the lived experiences of participating women veterans, as well as the contributions of our expert stakeholders, highlight a number of domains concerning how UK women veterans perceive and experience mental ill health and treatment or support services. Taken together, all these findings provide direction for future academic, policy and clinical work that can contribute to improving access to the best evidenced treatments for UK women veterans who have experienced sexual trauma, and are in need of mental health treatment and more general support.

References

Chapter 1

1. NATO. *Summary of the National Reports of NATO Member and Partner Nations to the NATO Committee on Gender Perspectives*. NATO, https://www.nato.int/cps/en/natohq/topics_132342.htm (2019).
2. House of Commons Defence Committee. Protecting those who protect us: Women in the Armed Forces from Recruitment to Civilian Life: Government Response to the Committee's Second Report, https://committees.parliament.uk/work/856/women-in-the-armed-forces-from-recruitment-to-civilian-life/publications/ (2021).
3. Office for National Statistics. Characteristics of UK armed forces veterans, England and Wales, https://www.ons.gov.uk/ (2023).
4. Godier-McBard LR, Gillin N, Fossey MJ. 'Treat everyone like they're a man': Stakeholder perspectives on the provision of health and social care support for female veterans in the UK. *Health & Social Care in the Community*; n/a. Epub ahead of print 15 March 2022. DOI: 10.1111/hsc.13790.
5. Baumann J, Williamson C, Murphy D. Exploring the impact of gender-specific challenges during and after military service on female UK Veterans. *Journal of Military, Veteran and Family Health* 2022; 8: 72–81.
6. Hendrikx LJ, Williamson C, Baumann J, et al. Understanding the Mental Health Needs of a Community-Sample of UK Women Veterans. *Illness, Crisis & Loss* 2021; 105413732110704.
7. Shapiro MO, Short NA, Raines AM, et al. Pain and posttraumatic stress: Associations among women veterans with a history of military sexual trauma. *Psychological Trauma: Theory, Research, Practice, and Policy* 2022.
8. Paige C, Dodds C, Jones C. Mental health and well-being of LGBT+ Veterans dismissed from the British Armed Forces before January 2000. *Journal of Military, Veteran and Family Health* 2021; 7: 122–126.
9. LGBT Veterans Independent Review. Final Report. Independent Review by Lord Etherton into the service and experience of LGBT veterans who served in HM Armed Forces between 1967 and 2000. https://www.gov.uk/government/publications/lgbt-veterans-independent-review (2023).
10. House of Commons Defence Committee. *Protecting those who protect us: Women in the Armed Forces from Recruitment to Civilian Life*, https://committees.parliament.uk/work/856/women-in-the-armed-forces-from-recruitment-to-civilian-life/publications/ (2021).
11. Williamson C, Baumann J, Murphy D. Military families: the impacts of having a first child during service on military mothers. *BMJ Mil Health* 2021; bmjmilitary-2021-001928.
12. Williamson C, Baumann J, Murphy D. Adverse childhood experiences, military adversities, and adult health outcomes among female Veterans in the UK. *Journal of Military, Veteran and Family Health* 2022; e20210070.
13. Morgan L. Understanding sexual offences in UK military and veteran populations: delineating the offences and setting research priorities. *BMJ Mil Health* 2022; 168: 146–149.
14. Wilson LC. The Prevalence of Military Sexual Trauma: A Meta-Analysis. *Trauma, Violence, & Abuse* 2018; 19: 584–597.
15. Blais RK, Brignone E, Fargo JD, et al. The importance of distinguishing between harassment-only and assault military sexual trauma during screening. *Military Psychology* 2019; 31: 227–232.
16. Monteith LL, Menefee DS, Forster JE, et al. A Closer Examination of Sexual Trauma During Deployment: Not all Sexual Traumas are Associated with Suicidal Ideation. *Suicide Life Threat Behav* 2016; 46: 46–54.
17. Hendrikx LJ, Williamson V, Murphy D. Adversity during military service: the impact of military sexual trauma, emotional bullying and physical assault on the mental health and well-being of women veterans. *BMJ Mil Health* 2021; bmjmilitary-2021-001948.
18. Blais RK, Brignone E, Fargo JD, et al. Assailant identity and self-reported nondisclosure of military sexual trauma in partnered women veterans. *Psychological Trauma: Theory, Research, Practice, and Policy* 2018; 10: 470–474.
19. Moreau C, Bedretdinova D, Duron S, et al. From sexual harassment to sexual assault: Prevalence and correlates of sexual trauma in the French military. *PLoS ONE* 2021; 16: e0259182.
20. Mota N, Sommer JL, Bolton S-L, et al. Prevalence and Correlates of Military Sexual Trauma in Service Members and Veterans: Results From the 2018 Canadian Armed Forces Members and Veterans Mental Health Follow-up Survey. *Can J Psychiatry* 2022; 070674372211252.
21. Buyse K, Goorts K, Peeters D, et al. Sexual harassment at work within Belgian Defence: a prevalence study. *BMJ Mil Health* 2021; bmjmilitary-2021-001855.
22. Morris EE, Smith JC, Farooqui SY, et al. Unseen Battles: The Recognition, Assessment, and Treatment Issues of Men With Military Sexual Trauma (MST). *Trauma, Violence, & Abuse* 2014; 15: 94–101.
23. Maguen S, Cohen B, Ren L, et al. Gender Differences in Military Sexual Trauma and Mental Health Diagnoses among Iraq and Afghanistan Veterans with Posttraumatic Stress Disorder. *Women's Health Issues* 2012; 22: e61–e66.
24. Tiet QQ, Leyva YE, Blau K, et al. Military sexual assault, gender, and PTSD treatment outcomes of U.S. Veterans. *J Trauma Stress* 2015; 28: 92–101.

25. Creech SK, Kroll-Desrosiers A, Benzer JK, et al. The impact of military sexual trauma on parent-infant bonding in a sample of perinatal women veterans. *Depress Anxiety* 2022; 39: 201–210.

26. Forkus SR, Weiss NH, Goncharenko S, et al. Military Sexual Trauma and Risky Behaviors: A Systematic Review. *Trauma Violence Abuse* 2021; 22: 976–993.

27. Nichter B, Holliday R, Monteith LL, et al. Military sexual trauma in the United States: Results from a population-based study. *J Affect Disord* 2022; 306: 19–27.

28. Kimerling R, Gima K, Smith MW, et al. The Veterans Health Administration and military sexual trauma. *Am J Public Health* 2007; 97: 2160–2166.

29. Surís A, Lind L, Kashner TM, et al. Sexual assault in women veterans: an examination of PTSD risk, health care utilization, and cost of care. *Psychosom Med* 2004; 66: 749–756.

30. Suris AM, Lind L, Kashner TM, et al. Sexual assault in women veterans: an examination of PTSD risk, health care utilization, and cost of care. *Psychosomatic Medicine* 2004; 66: 749–756.

31. Newins A, Glenn J, Wilson L, et al. Psychological Outcomes Following Sexual Assault: Differences by Sexual Assault Setting. *Psychological Services* 2021; 18: 504–511.

32. Graham K, Murphy D, Hendrikx LJ. Exploring Barriers to Mental Health Treatment in the Female Veteran Population: A Qualitative Study. *Journal of Veterans Studies* 2022; 8: 151–164.

33. Campbell G, Williamson V, Murphy D. 'A hidden community'. The experiences of help-seeking and receiving mental health treatment in UK women veterans: a qualitative study. *Armed Forces and Society.* In press.

34. Sadler AG, Lindsay DR, Hunter ST, et al. The impact of leadership on sexual harassment and sexual assault in the military. *Military Psychology* 2018; 30: 252–263.

35. Wolff KB, Mills PD. Reporting Military Sexual Trauma: A Mixed-Methods Study of Women Veterans' Experiences Who Served From World War II to the War in Afghanistan. *Military Medicine* 2016; 181: 840–848.

Chapter 2

1. Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021; n71.

2. Higgins JP, Thomas J, Chandler J, et al. (eds). *Cochrane Handbook for Systematic Reviews of Interventions*. version 6.3 updated February 2022. Cochrane, www.training.cochrane.org/handbook (2022).

Chapter 3

1. National Institute for Health and Care Excellence (NICE). *Guidance: Post-traumatic stress disorder*, https://www.nice.org.uk/guidance/ng116 (2018).

2. Forbes D, Lockwood E, Phelps A, et al. Trauma at the Hands of Another: Distinguishing PTSD Patterns Following Intimate and Nonintimate Interpersonal and Noninterpersonal Trauma in a Nationally Representative Sample. *J Clin Psychiatry* 2014; 75: 147–153.

3. Kelley LP, Weathers FW, McDevitt-Murphy ME, et al. A comparison of PTSD symptom patterns in three types of civilian trauma: PTSD Symptom Patterns. *J Traum Stress* 2009; 22: 227–235.

4. Aakvaag HF, Thoresen S, Wentzel-Larsen T, et al. Broken and guilty since it happened: A population study of trauma-related shame and guilt after violence and sexual abuse. *Journal of Affective Disorders* 2016; 204: 16–23.

5. Regehr C, Alaggia R, Dennis J, et al. Interventions to Reduce Distress in Adult Victims of Sexual Violence and Rape: A Systematic Review. *Campbell Systematic Reviews* 2013; 9: 1–133.

6. Parcesepe AM, Martin SL, Pollock MD, et al. The effectiveness of mental health interventions for adult female survivors of sexual assault: A systematic review. *Aggression and Violent Behavior* 2015; 25: 15–25.

7. Straud CL, Siev J, Messer S, et al. Examining military population and trauma type as moderators of treatment outcome for first-line psychotherapies for PTSD: A meta-analysis. *Journal of Anxiety Disorders* 2019; 67: 102133.

8. Varker T, Jones KA, Arjmand H-A, et al. Dropout from guideline-recommended psychological treatments for posttraumatic stress disorder: A systematic review and meta-analysis. *Journal of Affective Disorders Reports* 2021; 4: 100093.

9. Holder N, Maguen S, Holliday R, et al. Psychosocial Outcomes Among Veteran and Non-Veteran Survivors of Sexual Assault. *J Interpers Violence* 2022; 088626052210905.

10. Newins A, Glenn J, Wilson L, et al. Psychological Outcomes Following Sexual Assault: Differences by Sexual Assault Setting. *Psychological Services* 2021; 18: 504–511.

11. Cohen J. *Statistical Power Analysis for the Behavioral Sciences*. 0 ed. Routledge. Epub ahead of print 2018. DOI: 10.4324/9780203771587.

12. Kmet LM, Lee RC, Cook LS. *Standard quality assessment criteria for evaluating primary research papers from a variety of fields*. Edmonton: Alberta Heritage Foundation for Medical Research, 2004.

13. Acierno R, Jaffe AE, Gilmore AK, et al. A randomized clinical trial of in-person vs. home-based telemedicine delivery of Prolonged Exposure for PTSD in military sexual trauma survivors. *J Anxiety Disord* 2021; 83: 102461.

14. Christ N, Blain R, Pukay-Martin N, et al. Comparing veterans with posttraumatic stress disorder related to military sexual trauma or other trauma types: baseline characteristics and residential cognitive processing therapy outcomes. *Journal of Interpersonal Violence*. Epub ahead of print 2021. DOI: 10.1177/08862605211055082.

15. Holder N, Holliday R, Pai A, et al. Role of borderline personality disorder in the treatment of military sexual trauma-related posttraumatic stress disorder with cognitive processing therapy. *Behavioral Medicine* 2017; 43: 184–190.

16. Katz LS. Efficacy of Warrior Renew group therapy for female veterans who have experienced military sexual trauma. *Psychol Serv* 2016; 13: 364–372.

17. Katz LS, Sawyer WN. Pragmatic trial of brief warrior renew group therapy for military sexual trauma in VA primary care. *Psychological Services* 2020; 17: 433–442.

18. Kelly U, Haywood T, Segell E, et al. Trauma-sensitive yoga for post-traumatic stress disorder in women veterans who experienced military sexual trauma: interim results from a randomized controlled trial. *Journal of Alternative and Complementary Medicine* 2021; 27: S45–S59.

19. Kip KE, Hernandez DF, Shuman A, et al. Comparison of Accelerated Resolution Therapy (ART) for treatment of symptoms of PTSD and sexual trauma between civilian and military adults. *Military Medicine* 2015; 180: 964–971.

20. Story KM, Beck BD. Guided Imagery and Music with female military veterans: An intervention development study. *Arts Psychother* 2017; 55: 93–102.

21. Voelkel E, Pukay-Martin ND, Walter KH, et al. Effectiveness of cognitive processing therapy for male and female U.S. veterans with and without military sexual trauma. *Journal of Traumatic Stress* 2015; 28: 174–182.

22. Walter KH, Buckley A, Simpson JM, et al. Residential PTSD treatment for female veterans with military sexual trauma: Does a history of childhood sexual abuse influence outcome? *Journal of Interpersonal Violence* 2014; 29: 971–986.

23. Weiss BJ, Azevedo K, Webb K, et al. Telemental health delivery of skills training in affective and interpersonal regulation (STAIR) for rural women veterans who have experienced military sexual trauma. *Journal of Traumatic Stress* 2018; 31: 620–625.

24. Zaccari B, Sherman ADF, Febres-Cordero S, et al. Findings from a pilot study of Trauma Center Trauma-Sensitive Yoga versus cognitive processing therapy for PTSD related to military sexual trauma among women Veterans. *Complementary Therapies in Medicine* 2022; 70: 102850.

25. American Psychiatric Association. DSM-5 Update: Supplement to Diagnostic and Statistical Manual of Mental Disorders Fifth Edition. Washington, DC, pp. 33–33.

26. Surís A, Link-Malcolm J, Chard K, et al. A randomized clinical trial of cognitive processing therapy for veterans with PTSD related to military sexual trauma. *J Trauma Stress* 2013; 26: 28–37.

27. Resick PA, Schnicke MK. Cognitive processing therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology* 1992; 60: 748–756.

28. Steenkamp MM, Litz BT, Hoge CW, et al. Psychotherapy for Military-Related PTSD: A Review of Randomized Clinical Trials. *JAMA* 2015; 314: 489.

29. Surís A, Link-Malcolm J, Chard K, et al. A randomized clinical trial of cognitive processing therapy for veterans with PTSD related to military sexual trauma. *J Trauma Stress* 2013; 26: 28–37.

30. Schnurr PP, Friedman MJ, Engel CC, et al. Cognitive Behavioral Therapy for Posttraumatic Stress Disorder in Women: A Randomized Controlled Trial. *JAMA* 2007; 297: 820.

31. Schnurr PP, Chard KM, Ruzek JI, et al. Comparison of Prolonged Exposure vs Cognitive Processing Therapy for Treatment of Posttraumatic Stress Disorder Among US Veterans: A Randomized Clinical Trial. *JAMA Netw Open* 2022; 5: e2136921.

32. Steenkamp MM, Litz BT, Marmar CR. First-line Psychotherapies for Military-Related PTSD. *JAMA* 2020; 323: 656.

33. Kehle-Forbes SM, Ackland PE, Spoont MR, et al. Divergent experiences of U.S. veterans who did and did not complete trauma-focused therapies for PTSD: A national qualitative study of treatment dropout. *Behaviour Research and Therapy* 2022; 154: 104123.

34. Valentine LM, Donofry SD, Broman RB, et al. Comparing PTSD treatment retention among survivors of military sexual trauma utilizing clinical video technology and in-person approaches. *J Telemed Telecare* 2020; 26: 443–451.

35. Zappert LN, Westrup DA. Cognitive processing therapy for posttraumatic stress disorder in a residential treatment setting. *Psychotherapy: Theory, Research, Practice, Training* 2008; 45: 361–376.

36. Baca SA, Crawford JN, Allard CB. PTSD, depression, and suicidality among survivors of childhood sexual trauma (CST), military sexual trauma (MST), and sexual revictimization (CST + MST). *Psychological Trauma: Theory, Research, Practice, and Policy* 2021; No-Specified.

37. Lofgreen AM, Tirone V, Carroll KK, et al. Improving outcomes for a 3-week intensive treatment program for posttraumatic stress disorder in survivors of military sexual trauma. *J Affect Disord* 2020; 269: 134–140.

38. Carroll KK, Lofgreen AM, Weaver DC, et al. Negative posttraumatic cognitions among military sexual trauma survivors. *J Affect Disord* 2018; 238: 88–93.

39. Gobin R, Mackintosh M-A, Allard C. Predictors of differential PTSD treatment outcomes between veteran and civilian women after cognitive processing therapy. *Psychological Trauma: Theory, Research, Practice, and Policy* 2018; 10: 173–182.

40. Holliday R, Holder N, Surís A. Reductions in self-blame cognitions predict PTSD improvements with cognitive processing therapy for military sexual trauma-related PTSD. *Psychiatry Res* 2018; 263: 181–184.

41. Luterek JA, Bittinger JN, Simpson TL. Posttraumatic sequelae associated with military sexual trauma in female veterans enrolled in VA outpatient mental health clinics. *J Trauma Dissociation* 2011; 12: 261–274.

42. Ramirez MW, Woodworth CA, Evans WR, et al. A trauma-focused intensive outpatient program integrating elements of exposure therapy with acceptance and commitment therapy: Program development and initial outcomes. *Journal of Contextual Behavioral Science* 2021; 21: 66–72.

43. Gray RM, Budden-Potts D, Schwall RJ, et al. An open-label, randomized controlled trial of the reconsolidation of traumatic memories protocol (RTM) in military women. *Psychol Trauma* 2021; 13: 641–651.

44. Zalta AK, Held P, Smith DL, et al. Evaluating patterns and predictors of symptom change during a three-week intensive outpatient treatment for veterans with PTSD. *BMC Psychiatry* 2018; 18: 242.

45. Eftekhari A, Ruzek JI, Crowley JJ, et al. Effectiveness of National Implementation of Prolonged Exposure Therapy in Veterans Affairs Care. *JAMA Psychiatry* 2013; 70: 949.

46. Maguen S, Cohen B, Ren L, et al. Gender Differences in Military Sexual Trauma and Mental Health Diagnoses among Iraq and Afghanistan Veterans with Posttraumatic Stress Disorder. *Women's Health Issues* 2012; 22: e61–e66.

47. Tiet QQ, Leyva YE, Blau K, et al. Military sexual assault, gender, and PTSD treatment outcomes of U.S. Veterans. *J Trauma Stress* 2015; 28: 92–101.

48. Monteith LL, Menefee DS, Forster JE, et al. A Closer Examination of Sexual Trauma During Deployment: Not all Sexual Traumas are Associated with Suicidal Ideation. *Suicide Life Threat Behav* 2016; 46: 46–54.

49. Blais RK, Brignone E, Fargo JD, et al. The importance of distinguishing between harassment-only and assault military sexual trauma during screening. *Military Psychology* 2019; 31: 227–232.

50. Wilson LC. The Prevalence of Military Sexual Trauma: A Meta-Analysis. *Trauma, Violence, & Abuse* 2018; 19: 584–597.

51. Gusenbauer M, Haddaway NR. Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Res Syn Meth* 2020; 11: 181–217.

52. Galovski TE, Street AE, Creech S, et al. State of the Knowledge of VA Military Sexual Trauma Research. *J Gen Intern Med* 2022; 37: 825–832.

Chapter 4

1. Staiger T, Stiawa M, Mueller-Stierlin AS, et al. Masculinity and Help-Seeking Among Men With Depression: A Qualitative Study. *Front Psychiatry* 2020; 11: 599039.

2. Thompson AE, Anisimowicz Y, Miedema B, et al. The influence of gender and other patient characteristics on health care-seeking behaviour: a QUALICOPC study. *BMC Fam Pract* 2016; 17: 38.

3. Wendt D, Shafer K. Gender and Attitudes about Mental Health Help Seeking: Results from National Data. *Health Social Work* 2016; 41: e20–e28.

4. Liddon L, Kingerlee R, Barry JA. Gender differences in preferences for psychological treatment, coping strategies, and triggers to help-seeking. *Br J Clin Psychol* 2018; 57: 42–58.

5. Stevelink SAM, Jones N, Jones M, et al. Do serving and ex-serving personnel of the UK armed forces seek help for perceived stress, emotional or mental health problems? *European Journal of Psychotraumatology* 2019; 10: 1556552.

6. Brown MC, Creel AH, Engel CC, et al. Factors Associated With Interest in Receiving Help for Mental Health Problems in Combat Veterans Returning From Deployment to Iraq. *Journal of Nervous & Mental Disease* 2011; 199: 797–801.

7. Coleman SJ, Stevelink SAM, Hatch SL, et al. Stigma-related barriers and facilitators to help seeking for mental health issues in the armed forces: a systematic review and thematic synthesis of qualitative literature. *Psychol Med* 2017; 47: 1880–1892.

8. Mellotte H, Murphy D, Rafferty L, et al. Pathways into mental health care for UK veterans: a qualitative study. *European Journal of Psychotraumatology* 2017; 8: 1389207.

9. Williamson V, Greenberg N, Stevelink SAM. Perceived stigma and barriers to care in UK Armed Forces personnel and veterans with and without probable mental disorders. *BMC Psychol* 2019; 7: 75.

10. Hoge CW, Castro CA, Messer SC, et al. Combat Duty in Iraq and Afghanistan, Mental Health Problems, and Barriers to Care. *N Engl J Med* 2004; 351: 13–22.

11. Godier-McBard LR, Wood A, Kohomange M, et al. Barriers and facilitators to mental healthcare for women veterans: a scoping review. *Journal of Mental Health* 2022; 1–11.

12. Randles R, Finnegan A. Veteran help-seeking behaviour for mental health issues: a systematic review. *BMJ Mil Health* 2022; 168: 99–104.

13. Jones N, Greenberg N, Phillips A, et al. Mental Health, Help-Seeking Behaviour and Social Support in the UK Armed Forces by Gender. *Psychiatry* 2019; 1–16.

14. St Cyr K, Aiken AB, Cramm H, et al. Sex-specific differences in physical health and health services use among Canadian Veterans: a retrospective cohort study using healthcare administrative data. *BMJ Mil Health* 2021; e001915.

15. Godier-McBard LR, Cable G, Wood AD, et al. Gender differences in barriers to mental healthcare for UK military veterans: a preliminary investigation. *BMJ Mil Health* 2022; 168: 70–75.

16. Graham K, Murphy D, Hendrikx LJ. Exploring Barriers to Mental Health Treatment in the Female Veteran Population: A Qualitative Study. *Journal of Veterans Studies* 2022; 8: 151–164.

17. Hendrikx LJ, Williamson C, Baumann J, et al. Understanding the Mental Health Needs of a Community-Sample of UK Women Veterans. *Illness, Crisis & Loss* 2021; 105413732110704.

18. Weathers FW, Litz BT, Keane TM, et al. The PTSD Checklist for DSM-5 (PCL-5), www.ptsd.va.gov (2013).

19. Weathers FW, Blake DD, Schnurr PP, et al. The Life Events Checklist for DSM-5 (LEC-5), www.ptsd.va.gov (2013).

20. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006; 3: 77–101.

21. Braun V, Clarke V. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology* 2021; 18: 328–352.

22. Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health* 2021; 13: 201–216.

23. Scheppers E, van Dongen E, Dekker J, et al. Potential barriers to the use of health services among ethnic minorities: a review. *Family Practice* 2006; 23: 325–348.

24. Godier-McBard LR, Gillin N, Fossey MJ. 'Treat everyone like they're a man': Stakeholder perspectives on the provision of health and social care support for female veterans in the UK. *Health & Social Care in the Community*; n/a. Epub ahead of print 15 March 2022. DOI: 10.1111/hsc.13790.

25. Murphy D, Hunt E, Luzon O, et al. Exploring positive pathways to care for members of the UK Armed Forces receiving treatment for PTSD: a qualitative study. *European Journal of Psychotraumatology* 2014; 5: 21759.

26. Acierno R, Jaffe AE, Gilmore AK, et al. A randomized clinical trial of in-person vs. home-based telemedicine delivery of Prolonged Exposure for PTSD in military sexual trauma survivors. *J Anxiety Disord* 2021; 83: 102461.

27. Berg AM, Hem E, Lau B, et al. Help-Seeking in the Norwegian Police Service. *Jrnl of Occup Health* 2006; 48: 145–153.

28. Hom MA, Stanley IH, Spencer-Thomas S, et al. Mental health service use and help-seeking among women firefighters with a career history of suicidality. *Psychological Services* 2018; 15: 316–324.

29. Lane J, Le M, Martin K, et al. Police Attitudes Toward Seeking Professional Mental Health Treatment. *J Police Crim Psych* 2022; 37: 123–131.

30. Murphy D, Karatzias T, Busuttil W, et al. ICD-11 posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD) in treatment seeking veterans: risk factors and comorbidity. *Soc Psychiatry Psychiatr Epidemiol* 2021; 56: 1289–1298.

31. Carroll TD, Currier JM, McCormick WH, et al. Adverse childhood experiences and risk for suicidal behavior in male Iraq and Afghanistan veterans seeking PTSD treatment. *Psychological Trauma: Theory, Research, Practice, and Policy* 2017; 9: 583–586.

32. McCauley HL, Blosnich JR, Dichter ME. Adverse Childhood Experiences and Adult Health Outcomes Among Veteran and Non-Veteran Women. *Journal of Women's Health* 2015; 24: 723–729.

33. Baca SA, Crawford JN, Allard CB. PTSD, depression, and suicidality among survivors of childhood sexual trauma (CST), military sexual trauma (MST), and sexual revictimization (CST + MST). *Psychological Trauma: Theory, Research, Practice, and Policy* 2021; No-Specified.

34. Clancy CP, Graybeal A, Tompson WP, et al. Lifetime Trauma Exposure in Veterans With Military-Related Posttraumatic Stress Disorder: Association With Current Symptomatology. *J Clin Psychiatry* 2006; 67: 1346–1353.

35. Ministry of Defence. Population projections: UK armed forces Veterans residing in Great Britain, 2016 to 2028. 2019; 8.

Chapter 5

1. Campbell GM, Williamson V, Murphy D. 'A hidden community'. The experiences of help-seeking and receiving mental health treatment in UK women veterans: a qualitative study. *Armed Forces and Society*. In press.
2. Campbell GM, Biscoe N, Williamson V, Murphy, D. Evidence-based treatments for PTSD symptoms secondary to military sexual trauma in women veterans: a systematic review. Under review.
3. Campbell GM. *'A hidden community'. The experiences of help-seeking and receiving mental health treatment in UK women veterans*. Presented at British Psychological Society Defence & Security Section Conference; UK; 2023 May.
4. Campbell GM. *Female veterans and military sexual trauma: impacts and treatment*. Presented at The Forces in Mind Trust (FiMT) Research Centre Annual Conference; UK; 2023 March.
5. Murphy D. *Needs of UK female veterans and recommendations for guidance to best support survivors of military sexual trauma*. Presented at International Colloquium on Military Sexual Trauma and Other Forms of Abuse; Australasia; 2023 May.

Chapter 6

1. National Institute for Health and Care Excellence (NICE). *Guidance: Post-traumatic stress disorder*, https://www.nice.org.uk/guidance/ng116 (2018).
2. Watkins LE, Sprang KR, Rothbaum BO. Treating PTSD: A Review of Evidence-Based Psychotherapy Interventions. *Front Behav Neurosci* 2018; 12: 258.
3. Resick PA, Monson CM, Chard KM. *Cognitive Processing Therapy Veteran/Military Version*. Washington, DC, http://doi.apa.org/get-pe-doi.cfm?doi=10.1037/e514742018-001 (2008, accessed 25 May 2023).
4. Varker T, Jones KA, Arjmand H-A, et al. Dropout from guideline-recommended psychological treatments for posttraumatic stress disorder: A systematic review and meta-analysis. *J Affect Disord Rep* 2021; 4: 100093.
5. Edwards-Stewart A, Smolenski DJ, Bush NE, et al. Posttraumatic Stress Disorder Treatment Dropout Among Military and Veteran Populations: A Systematic Review and Meta-Analysis. *J Trauma Stress* 2021; 34: 808–818.
6. Baumann J, Williamson C, Murphy D. Exploring the impact of gender-specific challenges during and after military service on female UK Veterans. *J Mil Veteran Fam Health* 2022; 8: 72–81.
7. Hendrikx LJ, Williamson C, Baumann J, et al. Understanding the Mental Health Needs of a Community-Sample of UK Women Veterans. *Illn Crisis Loss* 2021; 105413732110704.
8. Shapiro MO, Short NA, Raines AM, et al. Pain and posttraumatic stress: Associations among women veterans with a history of military sexual trauma. *Psychol Trauma Theory Res Pract Policy* 2022; No-Specified.
9. Creech SK, Kroll-Desrosiers A, Benzer JK, et al. The impact of military sexual trauma on parent-infant bonding in a sample of perinatal women veterans. *Depress Anxiety* 2022; 39: 201–210.
10. Morgan L. Understanding sexual offences in UK military and veteran populations: delineating the offences and setting research priorities. *BMJ Mil Health* 2022; 168: 146–149.
11. MacManus D, Short R, Lane R, et al. Intimate partner violence and abuse experience and perpetration in UK military personnel compared to a general population cohort: A cross-sectional study. *Lancet Reg Health - Eur* 2022; 20: 100448.
12. Blais RK, Brignone E, Fargo JD, et al. The importance of distinguishing between harassment-only and assault military sexual trauma during screening. *Mil Psychol* 2019; 31: 227–232.
13. Williamson V, Greenberg N, Stevelink SAM. Perceived stigma and barriers to care in UK Armed Forces personnel and veterans with and without probable mental disorders. *BMC Psychol* 2019; 7: 75.
14. Turchik JA, Pavao J, Hyun J, et al. Utilization and intensity of outpatient care related to military sexual trauma for veterans from Afghanistan and Iraq. *J Behav Health Serv Res* 2012; 39: 220–233.

Appendices

Appendix A: Search Terms

Source: PubMed
Population
#1: “Military Health”[Mesh] OR “Military Personnel”[Mesh] OR “Veterans”[Mesh] OR “Military Health”[Mesh]
= 61,908 results
Exposure
#2: "Intimate Partner Violence"[Mesh] OR "Rape"[Mesh] OR "Sex Offenses"[Majr] OR “Sexual Trauma”[Mesh]
= 33,528 results
Combined
#3: #1 AND #2
= 640 results
Intervention/ Comparison
#4: "Psychotherapy"[Mesh] OR "Counseling"[Mesh] OR "Complementary Therapies"[Mesh] OR "Physical Therapy Modalities"[Mesh] OR "treat*"[tw]
= 7,167,826 results
Combined
#5: #3 AND #4
= 215 results
Outcome
#6: "Stress Disorders, Post-Traumatic"[Mesh] OR "Stress Disorders, Traumatic, Acute"[Mesh] OR “anxiet*”[tw] OR “depress*”[tw] OR “PTSD”[tw]
= 797,892 result
Full Combined
#7: #5 AND #6
= 142 results
Limit Date range: 1992-2022
= 140 results

Source: Embase (via Ovid)
Population
#1: ("veteran" or "military").mp.
= 108,270 results
Exposure
#2: (Rape or Domestic Violence or Intimate Partner Violence or Sexual Assault or sexual trauma).mp.
= 43,444 results
Combined
#3: #1 AND #2
= 1,246 results
Intervention
#4: (Psychotherap* or Alternative Therap* or "Complementary Therap*" or Physical therap* or treat*).mp.
= 9,594,960 results
Combined
#5: #3 AND #4
= 472 results
Outcomes/ Comparison
#6: (Psychological Trauma or Sexual Trauma or Stress Disorder or PTSD or Depress* or anxiet* or postrauma*).mp.
= 1,151,514 results
Combined
#7: #5 AND #6
= 402 results
Limit Date range: 1992-2022 and English language only
= 396 results

Source: Medline (via Ovid)
Population
#1: exp Military Personnel/ or exp Veterans/ or exp Military Health/ or exp Military Medicine/
= 83,233 results
Exposure
#2: exp Rape/ or exp Intimate Partner Violence/ or exp Sexual assault/ or exp sexual trauma/ or exp sexual violence/
= 37,738 results
Combined
#3: 1+2
= 736 results
Intervention/ Comparison
#4: exp Psychotherapy/ or exp Counseling/ or exp Complementary Therapies/ or exp Physical Therapy Modalities/ or "treat*".tw. or "therap*".tw.
= 8,135,452 results
Combined
#5: 3+4
= 250 results
Outcome
#6: exp Stress Disorders, Post-Traumatic/ or exp Stress Disorders, Traumatic, Acute/ or (exp Anger/ or exp Anxiety/ or exp Depression/ or exp Emotional Regulation/ or exp Psychological Distress/) or exp Anxiety Disorders/
= 766,512 results
Combined
#7: #5 AND #6
= 163 results
Limit to English, 1992-2022
= 161 results

Source: ScienceDirect
Limitations: 1992-2022, English only
Title/Author/Keyword search
(Military OR Veteran) AND (rape OR (sexual AND (violence OR assault OR trauma)) AND (treat OR therapy)
=78 results
Note: ScienceDirect did not accept wildcard characters and Boolean terms were limited to eight in total. If search was used in full text, returns were too numerous to be meaningful.

Source: Web of Science
Population
#1: ALL=(“Military Health” OR “Military Personnel” OR “Veteran” OR “Military”)
= 216,370 results
Exposure
#2: ALL=("Intimate Partner Violence" OR "rape" OR "sexual violence" OR “sexual trauma” OR “sexual assault”)
= 61,203 results
Combination
#3: #1 AND #2
= 1,569 resultsa
Intervention
#4: ALL=("Psychotherap*" OR "Counsel*" OR "Complementary Therap*" OR "Physical Therap*" OR "treat*")
=4,493,140 results
Combination
#5: #3 AND #4
= 510 results
Outcomes/ Comparison
#6: ALL=("PTSD” OR "Stress Disorder" OR “anxiet*” OR “depress*” OR “postrauma*”)
= 959,633 results

Full Combined search
#7: #5 AND #6
Full syntax: (((ALL=(“Military Health”OR “Military Personnel” OR “Veteran” OR “Military”)) AND ALL=("Intimate Partner Violence" OR "rape" OR "sexual violence" OR “sexual trauma” OR “sexual assault”)) AND ALL=("Psychotherapy" OR "Counselling" OR "Complementary Therapies" OR "Complementary therapy" OR "Physical Therapy" OR "Physical Therapies" OR "treatment" OR "treatments")) AND ALL=("PTSD” OR "Stress Disorder" OR “anxiet*” OR “depress*”)
= 408 results
Limit date range: 1992-latest
= 406 results

Source: PsycINFO (via Ovid)
Limitations: English Language only
Population
#1: exp Volunteer Military Personnel/ or exp Military Personnel/ or exp Military Medical Personnel/ or exp Military Veterans/
= 33,528 results
Exposure
#2: exp Rape/ or exp Domestic Violence/ or exp Intimate Partner Violence/ or exp Rape/ OR exp Sexual Assault/
= 61,194 results
Combined
#3: #1 AND #2
= 892 results
Intervention
#4: exp Psychotherapy/ or (Alternative Therapies or "Complementary and Alternative Therapies" or Alternative Therapies PsycINFO Subcluster Term).mp. or Physical therapy.mp. or treat*.tw.
= 938,474 results
Combined
#5: #3 AND #4
= 322 results
Outcomes/ Comparison
#6: exp Psychological Trauma/ or exp Sexual Trauma/ or exp Stress Disorders, Post-Traumatic/ or exp Stress Disorders, Traumatic, Acute/ or anxiet*.tw. or Depress*.tw
= 312,685 result
Full combined search
#7: #5 AND #6
= 128 results
Limit date range: 1992-latest
= 126 results

Source: Cochrane Library
Date: 17 August 2022
All text search
‘Military’ AND ‘trauma’ AND ‘sexual’
= 19 reviews
= 2 protocols
= 64 trials
= 1 clinical answer
= 86 results
Note: a looser search strategy was employed to ensure that any reviews covering prevalence rates were captured to ensure screening of sources.

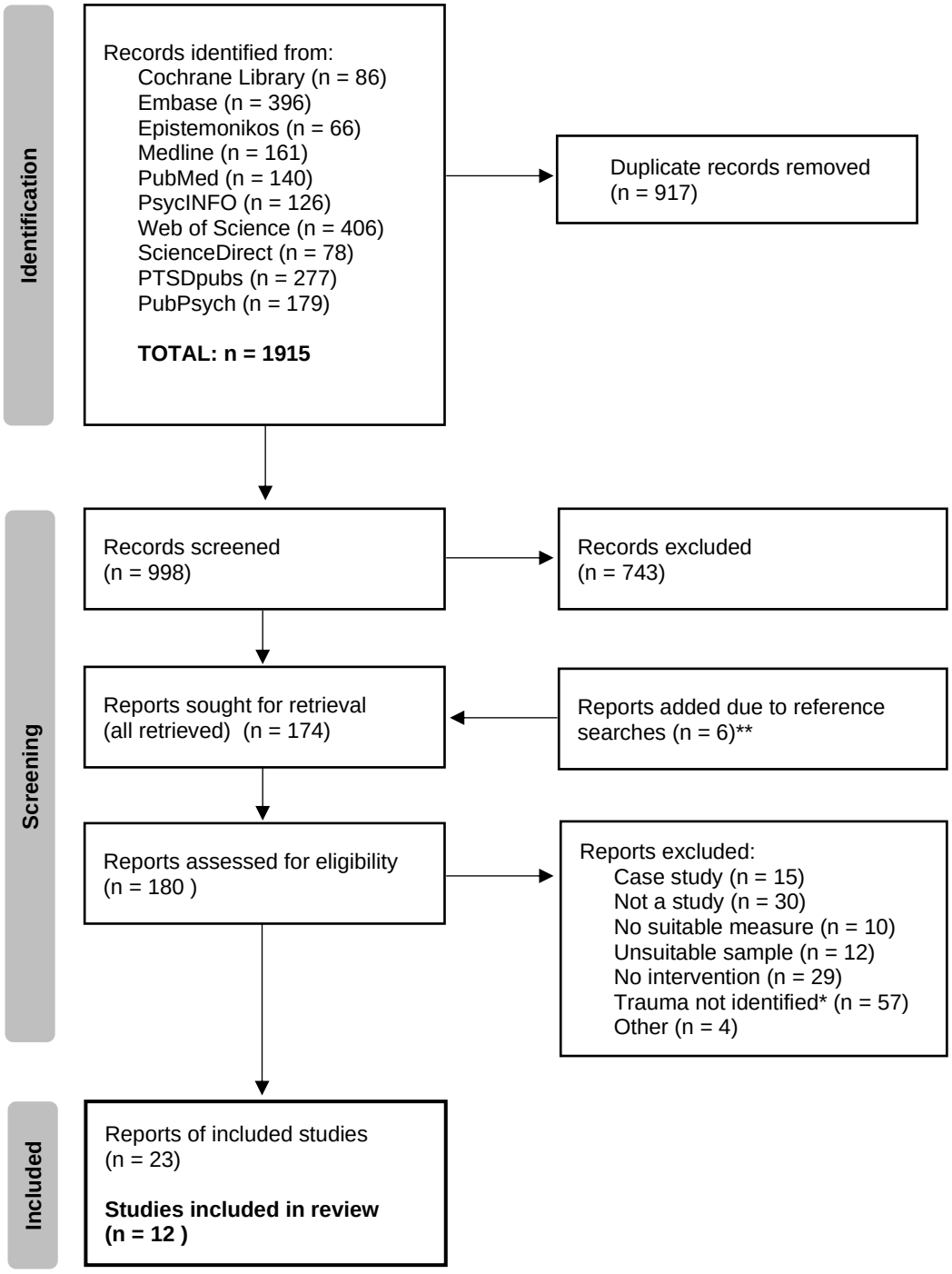
Source: Epistemonikos
Title/ Abstract search
‘Military’ AND ‘trauma’ AND ‘sexual’
= 66 results
Note: a loose search strategy was employed to ensure that any reviews covering prevalence rates were captured to ensure screening of sources.

Source: PTSDpubs

Limitations: Dates: 1992-2022, language: English, all publication types, search: anywhere
Population
#1: MAINSUBJECT.EXACT.EXPLODE(“Military Personnel”) OR MAINSUBJECT.EXACT.EXPLODE(“Veterans”) OR MAINSUBJECT.EXACT.EXPLODE(“Military Psychiatry”)
= 10,847 results
Exposure
#2: MAINSUBJECT.EXACT.EXPLODE("Rape") OR MAINSUBJECT.EXACT.EXPLODE("Military Sexual Trauma") OR MAINSUBJECT.EXACT.EXPLODE("Partner Abuse")
= 8,121 results
#3: #1 AND #2
= 758 results (670 journals, 35 books, 34 Diss/Theses, 2 reports)
Intervention
#4: MAINSUBJECT.EXACT.EXPLODE("Psychotherapy") OR MAINSUBJECT.EXACT.EXPLODE("Treatment") OR MAINSUBJECT.EXACT.EXPLODE("Physical Treatment Methods") OR MAINSUBJECT.EXACT.EXPLODE("Alternative Medicine")
= 26,229 results
#5: #3 AND #4
= 341 results (253 peer reviewed)
Outcomes/ Comparison
#6: MAINSUBJECT.EXACT.EXPLODE("PTSD") OR MAINSUBJECT.EXACT.EXPLODE("Anxiety Disorders") OR MAINSUBJECT.EXACT.EXPLODE("Mood Disorders") OR MAINSUBJECT.EXACT.EXPLODE("Acute Stress Disorder")
= 44,644 results
Full combined search
#7: #5 AND #6
= 277 results

Source: PubPsych
Limitations: dates 1992-2022
Text search
Military AND sexual AND treat*
= 179 results
Note: a wide search syntax was used as PubPsych is a limited database, but was included as a backstop check on other results.

Appendix B: PRISMA chart of search results and screening



*Index trauma either not identified as MST or not stratified according to inclusion criteria
**None included in final selection

Appendix C: Life Events Checklist (modified)

This modified version of the LEC-5 was administered online, and was completed by participants prior to the interview.

Listed below are a number of difficult or stressful things that sometimes happen to people. Please read through the list. For each event, please consider whether or not you have experienced the event during adulthood. If you experienced the event during adulthood, please indicate when the event occurred (before, during or after your military service).

	I did not experience this	***I experienced this BEFORE military service***	***I experienced this DURING military service***	***I experienced this AFTER military service***
Natural disaster (e.g., flood, hurricane, tornado, earthquake)				
Fire or explosion				
Transportation accident (e.g., car accident, boat accident, train wreck, plane crash)				
Serious accident at work, home or during recreational activity				
Exposure to toxic substance (e.g., dangerous chemicals, radiation)				
Physical assault (e.g., being attacked, hit, slapped, kicked, beaten up)				
Assault with a weapon (e.g., being shot, stabbed, threatened with a knife, gun, bomb)				
Sexual assault (e.g. rape, attempted rape, made to perform any type of sexual act through force or threat of harm)				
Other unwanted or uncomfortable sexual experience (such as harassment)				
Combat or exposure to a war-zone (in the military or as a civilian)				
Captivity (e.g., being kidnapped, abducted, held hostage, prison of war)				
Life-threatening illness or injury				
Severe human suffering				
Sudden, violent death (e.g., homicide, suicide)				
Sudden, unexpected death of someone close to you				
Serious injury, harm or death you caused to someone else				
Any other stressful event or experience (please describe briefly)				

Appendix D: Semi-structured interview schedule

Introduction: outline study, confirm consent.
Check demographics.

Background/ Ice-breaker

- Can you tell me about why you joined the Armed Forces?

Seeking support and treatment (access)
Preamble: *I'd like to move on to thinking about your decision and steps to access support and formal treatment…*

- Can you tell me about the type of support you had after the event(s) you detailed in the survey?
    - Did you have any informal support from friends and family?
    - Why or why not?
    - What was this support like?
    - How helpful was that support for you?
- Have you received a formal diagnosis for any of your past/present mental health difficulties? (If so, what diagnosis were you given?)
- Have you ever sought formal treatment for your symptoms?
    - *If YES*: At what point did you decide to seek treatment?
    - *If YES:* What contributed to your decision to seek out mental health treatment? **PROBE**: why/ EXPAND (eg tipping point/ familial intervention)
    - *If NO*: What contributed to your decision to not seek out mental health treatment?
    - *If NO*: Looking back, how do you feel about your decision not to seek treatment?
- How did you hear about and access the treatment (e.g. referral)?
- What was your experience of trying access support?
    - What factors encouraged or facilitated you accessing the treatment you wanted?
    - What factors hindered or made accessing treatment more difficult?
    - How do you think your experience of accessing support compares to your male peers?
- Did anyone else play a role, in you seeking formal treatment? EXPAND
- Given your experience in seeking out treatment, what changes do you think could be made to support women veterans in a similar position in seeking out and accessing treatment?

Experiences during treatment (engagement and completion)

- Can you briefly describe the treatment you received (treatment type)?
    - How long after seeking treatment, did this treatment begin?
    - What was the format of the treatment? (group, one-to-one etc)
    - How long did the treatment last?
- Did you complete the treatment?
    - If NO, what do you feel contributed to this?
    - Was there anything that could have been done differently to support you in completing treatment, and if so, what would that be?
    - If YES, what do you feel facilitated this?
- How did the clinician interact with you/ what was that relationship like?
- What was your overall experience of the treatment?
    - How satisfied were you with the treatment you received?
    - What aspects of the treatment did you find most beneficial?
    - What aspects of the treatment did you find most challenging?
- Do you feel the treatment was effective and helped with you mental health difficulties?
    - If YES, in what areas of your life did you notice the impact?
    - If NO, was there any impact of the treatment you received?
- Can you tell me a bit about whether you feel the treatment you received felt appropriate in meeting your needs and experiences as a <u>woman</u> and as a <u>veteran</u>?
- Was the treatment you received tailored to your experiences and circumstances in any way? (eg language, timings to fit round other commitments)
- Given your experiences engaging with treatment, what adjustments do you feel could be made during treatment to improve the experience for woman veterans?
    - In terms of the treatment experience
    - And in terms of improving chances of completing treatment

Closing Questions

- Is there anything about your experience that we've left out that you would like included?
- What are your feelings about this interview and all that we have covered?
- [prompt for further debrief or signposting to support as required]

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September 2023