An Exploratory Domain Analysis of Deployment Risks and Protective Features and their association to Mental Health, Cognitive Functioning and Job Performance in Military Personnel

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Abstract

Background: Meta-analyses of military deployment involve the exploration of focused associations between predictors and peri and post-deployment outcomes.

Objective: We aimed to provide a large-scale and high-level perspective of deployment-related predictors across eight peri and post-deployment outcomes.

Design: Articles reporting effect sizes for associations between deployment-related features and indices of peri and post-deployment outcomes were selected. Three-hundred and fourteen studies (*N*=2,045,067) and 1,893 relevant effects were retained. Deployment features were categorized into themes, mapped across outcomes, and integrated into a big-data visualization.

Methods: Studies of military personnel with deployment experience were included. Extracted studies investigated eight possible outcomes reflecting functioning (e.g., post-traumatic stress, burnout). To allow comparability, effects were transformed into a Fisher's Z. Moderation analyses investigating methodological features were performed.

Results: The strongest correlates across outcomes were emotional (e.g., guilt/shame: Z = 0.59 to 1.21) and cognitive processes (e.g., negative appraisals: Z = -0.54 to 0.26), adequate sleep on deployment (*Z* = -0.28 to -0.61), motivation (*Z* = -0.33 to -0.71), and use of various coping strategies/recovery strategies (*Z* = -0.25 to -0.59).

Conclusions: Findings pointed to interventions that target coping and recovery strategies, and the monitoring of emotional states and cognitive processes post-deployment that may indicate early risk.

Keywords: potentially traumatic events, resilience, motivation, risks, protective factors, meta-analysis

Prior meta-analysis of military deployment has focused on a specific, and piecemeal, analysis of mental ill-health conditions (e.g., Blore et al., 2015; Bonde et al., 2016; Hines et al., 2016; Kok et al., 2012; Xue et al., 2015), psychiatric disorder prevalence (e.g., Blore et al., 2015; Bog et al., 2018; Hines et al., 2016; Kok et al., 2012; Stimpson et al., 2003) or a narrow set of features related to the deployment context (e.g., deployment length, combat exposure; Bog et al., 2018; Buckman et al., 2011). Such meta-analyses are valuable for aggregating comparable effects and constructs to provide a synthesis of the current state of examined associations. However, by their nature meta-analyses need to be piecemeal and are unable to provide insights into the relative associations between deployment-related features and multiple outcomes, common or cumulative correlates of different outcomes, and areas of needed research. To address this, we sought to advance a different approach to the synthesis of an existing body of work. This approach contrasts the typical assumption of specificity to achieve a comprehensive understanding of the scholarship via an inclusive review of the literature and integration of a wide range of discrete meta-analytical estimates, but at the same time risks the aggregation of effects that are potentially disparate.

Resilience as an outcome is defined as the maintenance or quick recovery of mental health during and/or after exposure to stressors (Kalisch et al., 2017), such as military deployment. Peri and post-deployment mental health is often used as an indicator of resilience, with most personnel exhibiting resilience. Previous research demonstrates that most personnel experience resilience peri and post-deployment (Bartone, 2006; Bonanno et al., 2012). However, a minority of personnel may experience mental health issues, indicating a non-resilient trajectory (e.g., <15%; Bonanno et al., 2012), rather than a resilient trajectory indicated by the absence of mental ill-health symptoms, particularly symptoms of internalizing mental health concerns, including anxiety, depression, and post-traumatic stress disorder (e.g., Bonanno et al., 2012; Castro & McGurk, 2007). Yet, the presence or absence of mental ill-

health alone provides an incomplete picture of post-deployment personnel outcomes and resilience. Other indicators of resilience, such as job performance and cognitive functioning, are also important (e.g., Gucciardi et al., 2018). The effects of deployment on cognitive functioning and job performance are two outcomes critical to personnel, their teams, and operational success. This exploratory domain analysis sought to provide a large-scale synthesis of the deployment-related features that are associated with emotional and performance resilience in a specific organizational context: military deployment.

We consider this methodological approach as an *exploratory domain analysis*, similar to the domain analysis concept, for the critique of evidence and rigor within a broad topic of inquiry (Ioannidis & Trikalinos, 2007). We conceptualized an exploratory domain analysis as the assembly of several meta-estimates, based on independent studies grouped by concept similarity, that permit an understanding of a domain (i.e., "a common general theme, common type of intervention, common type of subjects, common methodology, common research environments, common language of publication or combinations of these factors" Ioannidis & Trikalinos, 2007 p. 247). This approach enables us to capture a broader range of empirical studies with different statistical forms, contrary to typical assumptions regarding a meta-analysis (Lipsey & Wilson, 2001). In this way, we seek to embrace heterogeneity for the purpose of providing a big-picture perspective. The domain of interest was the effects of a military deployment event on peri and post-deployment personnel functioning.

We aimed to: (1) gauge the state-of-the-science, (2) identify and compare the magnitude of effects, and (3) identify common and unique correlates across distinct outcomes. The methodology applied attempted to create a high-level synthesis of the available evidence across this domain. We employed a systematic-review and meta-analytic methodology to tabulate a range of effects, integrated into an information system to draw an inclusive picture of the associations between different correlates and distinct outcomes.

Methods

The analysis protocol was registered on the Open Science Framework (OSF page) using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocol template (Shamseer et al., 2015). eMethods 1 (supplementary materials) documents departures from the pre-registration protocol. The review was conducted and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA; Page et al., 2021).

Identification and Selection of Studies

Searches (developed by the lead author with support from a librarian) were initially conducted on 1st April 2020 and updated on December 8th 2021. Databases included: Web of Science, Scopus (Elsevier platform), Embase (Ovid platform), Medline (ProQuest platform), PsychInfo (ProQuest platform), CINHAL Plus (EBSCOhost platform), and ProQuest Dissertations and Theses (ProQuest platform) from database inception to December 8, 2021 (eMethods 2; supplementary). Grey literature was accessed using Defence Government websites and an information request to the five-nation technical collaboration. Dissertations also were included. A backward search was conducted by manually searching reference lists of eligible studies and meta-analyses. A forward search was conducted by searching for papers citing eligible articles using Web of Science and Google Scholar.

Abstract and full paper screening involved the application of the standardized inclusion and exclusion criteria. Three reviewers performed the title and abstract screening. Forty percent of title and abstracts were screened by two authors and conflicts were resolved via a third author (reviewer agreement was 90%; κ =.66). Four authors screened full papers with a 40% overlap in screening (reviewer agreement was 91%, κ=.74). Corresponding authors were contacted twice when studies did not report sufficient information to compute the effect size.

Inclusion and Exclusion Criteria

Included studies related to military personnel that had experienced at least one

deployment (i.e., activities involving the movement of military personnel from a home station to an operating location). We scoped the inclusion of outcomes to create a high-level viewpoint about resilience in the context of peri- and post- military deployment. Accordingly, extracted papers included outcomes commonly used across the deployment or organizational scholarship as indicators of resilience peri- and post- military deployment. This included internalizing mental ill-health symptoms (i.e., post-traumatic stress disorder (PTSD), depression, anxiety, distress; Bonanno et al., 2012; Davydov et al., 2010; Dickstein et al., 2010) often measured as indicators of resilient (absence of symptoms) versus dysfunctional (presence of symptoms) trajectories post-deployment (e.g., Bonanno et al., 2012) and non-clinical measures of occupational resilience during risk (e.g., perceived resilience, burnout; Adler et al., 2017). Resilient functioning peri- and post- military deployment is also captured by positive psychological functioning indicators, such as wellbeing, perceived resilience, life satisfaction and organizational relevant outcomes such as performance and cognitive functioning (Gucciardi et al., 2018). Job performance was operationalized as behavioral efforts directed at goals of expected value to an organization (Motowidlo, 2003) and included third-party or self-reported measures of job performance/impairment and organizational citizenship behavior. Cognitive function included third-party assessments or self-reports (e.g., attention, memory). Each outcome was analysed separately. Together, these outcomes aimed to capture a multifaceted body of evidence about occupational resilience in military personnel.

All possible effect sizes were included (i.e., odds ratio, hazard ratio, standardized mean differences, standardised model coefficients, correlations). We also included studies with minimal quantitative information that allowed us to calculate an effect size (e.g., *M, SD*, sample size).

Correlates of outcomes were included if operationalized within the source manuscript as job, organizational, social, or individual psychological features measured in relation to a

deployment event. Deployment-related correlates were considered for inclusion on the bases of: (1) the timing of measurement (i.e., during deployment leadership support, positive appraisal, sleep quality), (2) retrospective accounts of resources or demands that are characteristic of deployment (e.g., deployment length, combat exposure during a previous deployment) or directly referenced deployment (e.g., team support on a previous deployment), and (3) personnel dispositional features measured just prior to or during deployment that were anticipated by the authors to effect deployment outcomes (e.g., trait hardiness) and associated with peri- or post-deployment functioning. If study correlates did not meet one of these minimal criteria for inclusion, they were excluded. Additional information about the identification of correlates is provided in eMethods 3 (supplementary materials).

Exclusion criteria are presented in the PRISMA flow chart (Figure 1). We excluded papers focused on participants with a known medical or mental health condition, or with a discrete experience (e.g., prisoner of war), because biological or social differences may create disparities in the magnitude of effects ungeneralizable to the population (Guyatt et al., 2008).

Data Extraction and Expert-led Taxonomy

Four authors independently extracted data using a standardized form with 50% of all records reviewed by two reviewers. Data extracted included: (1) study information (i.e., first author name, year of publication, study design, publication type), (2) participant characteristics (i.e., service of personnel, sample size, % males, age statistics, country), (3) deployment characteristics (i.e., deployment type, deployment location), (4) method of data collection for outcome (e.g., self-report, clinical assessment, administrative data), (5) correlates and outcome type and measures, and (6) data for calculating effect size. The approach to categorizing the range of extracted effects attempted to balance the need to mirror the terms used in the literature (i.e., specificity), but group studies in a way that enabled meta-analysis (i.e., inclusivity; eMethods 4). To be specific and inclusive, we used a hierarchical taxonomy, dividing the

correlates into more general and more specific themes (eMethods 5; supplementary). The more specific second-order themes mirrored most closely the intention of the original authors and therefore these more specific themes were less challenging to derive and for this reason were the basis of most analyses. However, there were times that a set of constructs needed to be grouped into a meaningful category capturing their similarities. For example, team-based resources included measures of team factors that could be considered resources as defined by the job-demands and resources model (Bakker & Demerouti, 2007). In terms of the more inclusive category (first-order themes), at times, an overarching definition provided clarity for category inclusion, as was the case for potentially traumatic events. However, other themes at this level required experts to devise and revise their coding until consensus was reached.

Two authors assessed risk of bias (40% of the studies rated twice). To ensure relevance to studies in the field, permit brevity, and maximize feasibility, a sub-set of items were selected and adapted from the Research Triangle Institute item bank (Viswanathan & Berkman, 2012; eMethods 6). Risk of bias ratings and the alignment coding is presented in eTable 1.

Streamlining Effect Sizes and Statistical Analysis

Extracted effects were transformed into a Fisher Z's metric, to allow comparability between the various effect sizes. Details of data aggregation and addressing multiplicity is included in eMethods 7,8 (supplementary). Meta-analytical models were created for the estimation of each first and second-order themes. We used the multi-level procedure in the Metafor R package (Viechtbauer, 2010) using 'study' as a level (random intercept). The integration of meta-analytic estimates, within each theme, were illustrated using a tornado plot (Figure 2).

A DerSimonian-Laird estimator was used as a common, default, estimator (Higgins et al., 2019). Measures of meta-estimate heterogeneity were also reported within each theme, using the Q-test and I^2 statistic to estimate the proportion of total variance due to heterogeneity

in our sample (Higgins & Thompson, 2002). The Q-statistic determines the presence or absence of heterogeneity, whereas the I^2 statistic quantifies the degree of heterogeneity. I^2 values of 25%, 50% and 75% were interpreted as indicating a low, moderate, and large amount of heterogeneity (Higgins, et al., 2002). Patterns of publication bias were assessed using funnel plots and Egger's test (Egger et al., 1997).

Where sufficient data permitted, a meta-regression was used to assess several moderators. A subgroup analysis explored whether deployment type (combat/war-zone or not) effected the effect size estimates. Further, given the diverse and nuanced range of subthemes explored, sensitivity analyses aimed to test the robustness of the results across study artifacts: (1) sample size, (2) risk of bias score, and (3) study design (longitudinal vs cross-sectional), (4) effect-size type, (5) bi-variate vs multivariate models and (6) number of model covariates.

Results

Figure 1 provides the flow of record identification, screening, and selection for both the initial and updated data selection process. As detailed in the PRISMA flow diagram, the analysis was updated in Dec 2021. We identified an additional 31 studies in this update and found little change to the results of the previous analysis or interpretations from the data. We have provided a table on our OSF page for the study that permits a comparison between older and updated meta-estimates for the main analyses. A total of 314 studies (N= 2,045,067) were retained in the analysis. The sample size of studies was skewed (M=6,492; SD=38,072.29) and therefore percentiles are reported: 5th (n=88); 25th (n=238); 50th (n=559); 75th (n=1,824); and 95th (n=17,481). Applying these inclusion and exclusion criteria generated 1,893 relevant effects. Included studies were mostly from the USA (78.03%; k = 245), involved Army personnel (80.82%; k = 198), deployment to the Middle East (75.16%; k = 236), cross-sectional (63.06% k=198), and were investigations of combat/war-zone deployment contexts (58.92%; k = 185). Information for each study is presented in eTable 1 (supplementary).

eTable 2 provides the collated Fisher's *Z* meta-analysis statistics for each first and second-order themes including *Q*-test of heterogeneity and I^2 statistic, number of contributing effect sizes, and model type used to conduct the analysis. eFigures 1-7 (supplementary) illustrate the Fisher's Z meta-statistic for the first and second-order themes. Figure 2 summarizes the combined list of meta-analytical effects, displaying the cumulative sum of the available meta-estimates within each of the second-order themes.

The Association of Potentially Traumatic Events to Outcomes

A total of 259 studies (82.48%) measured potentially traumatic deployment events (e.g., combat exposure). Exposure to traumatic events was one of the most strongly associated correlates of PTSD and psychological distress (PTSD: $Z = 0.29$; 95% CI [0.26 to 0.31], $k = 217$; psychological distress: $Z = 0.18$; 95% CI [0.14 to 0.23], $k = 47$). Potentially traumatic events were significantly positively associated with burnout ($Z = 0.21$; 95% CI [0.15 to 0.26], $k = 2$), but had a non-significant association to positive psychological functioning ($Z = -0.18$; 95% CI [-0.37 to 0.01], $k = 6$). Potentially traumatic events had a negative weak, albeit significant, association with job performance ($Z = -0.09$; 95% CI [-0.13 to -0.05], $k = 4$) and no statistical association with cognitive function ($Z = 0$; 95% CI [-0.04 to 0.05], $k = 3$). Having noted this, other deployment deployment-demands were frequently significant across outcomes (e.g., difficult living and working conditions; Z=-0.25 to 0.43).

Common and Unique dominant Correlates across Outcomes

While infrequently studied, guilt/shame emotions were often the strongest correlate of detrimental functioning (PTSD: $Z = 1.21$; 95% CI [0.93 to 1.48], k =3; depression: $Z = 0.59$; 95% CI [0.30 to 0.88], k =1; positive psychological functioning $Z = -1.07$; 95% CI [-1.19 to -0.96]). Similarly, anger and aggression were also dominant correlate across mental ill-health indices (PTSD: $Z = 0.38$; 95% CI [0.19 to 0.57], $k = 3$; depression: $Z = 0.48$; 95% CI [0.34 to 0.61], $k = 2$). Negative appraisals (other than threat) of the deployment (e.g., a sense of

powerlessness) were also a dominant negative correlate across several outcomes including job performance (Z = -0.28; 95% CI [-0.29 to -0.27], k=1). Avoidance coping had a relatively strong association with poorer mental ill-health (PTSD: Z = 0.35; 95% CI [0.18 to 0.52], k = 2; depression: Z = 0.23; 95% CI [0.12 to 0.35], k=2; anxiety: Z=0.29; 95% CI [0.27 to 0.31], k=1; psychological distress: Z = 0.37; 95% CI [0.44 to 0.29], k = 1).

In terms of correlates associated with enhanced functioning, adequate sleep during deployment featured as a dominant correlate across several indices of functioning (PTSD: Z = -0.52; 95% CI [-0.67 to -0.38], k = 3; anxiety: Z = -0.1; 95% CI [-0.65 to -0.56] k = 1; depression: Z = -0.44; 95% CI [-0.67 to -0.22], k = 3) as was motivation (PTSD*:* Z = -0.41; 95% CI [-0.59 to -0.22], k = 3; depression: Z = -0.64; 95% CI [-0.73 to -0.56], k = 2), psychological distress: Z = -0.33; 95% CI [-0.49 to -0.17], k = 3; burnout: Z = -0.71; 95% CI [-0.86 to -0.55], k = 1). The use of various coping strategies/stress recovery activities, rather than a specific strategy, was correlated with several outcomes (PTSD: Z = - 0.37; 95% CI [-0.48 to -0.25]; k = 3; depression: Z = -0.59; 95% CI [-0.72 to -0.46], k=1; anxiety: Z = -0.51[-0.64 to -0.38], k = 1; performance (Z = 0.44; 95% CI [0.31 to 0.56], k = 1).

Twenty-four effects contributed to the investigation of cognitive function in relation to a narrow band of three deployment-related correlates. Feelings of emotional stress, anxiety, tension or fear on deployment was the most related to cognitive functioning (Z = -0.74; 95% CI [-0.94 to -0.55], k = 1) followed by physical demands on deployment (Z = -0.73; 95% CI [-0.84 to -0.61]; k = 1). Thirteen effects contributed to the analysis of job performance. The correlates dominantly negatively associated with job performance were perceived problematic family life or functioning (Z = -0.44; 95% CI [-0.60 to -0.27], k= 1) and feelings of concern or worry about deployment or its effects (Z = -0.21; 95% CI [-0.25, -0.17], k = 1). Positive associations with job performance occurred for supervisor or leadership support (Z = 0.30; 95% CI [0.17 to 0.43], k = 1) and team-based resources (Z = 0.21; 95% CI [0.18 to 0.24], k = 1).

289 **The Moderating Role of Deployment Type**

290 Deployment type (non-combat/non-war zone [0] vs combat/war-zone [1]) was explored
291 for its role in explaining differences in effect size estimates for first-order themes (eTable 3;
292 supplementary). Several correlates were more strongly associated with greater negative
293 outcomes for mental ill-health in the context of *non*-war-zone deployment. For example, the
294 association between potentially traumatic events and mental ill-health (i.e., psychological
295 distress and PTSD) was weaker for combat/war-zone, compared to *non*-war deployments.

296 **Analysis of Heterogeneity**

297 We used standard metrics (I^2 statistic) to interpret the degree of heterogeneity of study
298 effects within each meta-estimate. When significant, heterogeneity tended to be large (above
299 75%) and was observed across most outcomes. Low and moderate heterogeneity was
300 principally observed for the burnout and cognitive functioning outcomes. This may relate to
301 the greater level of standardization in the measurement of these outcomes or to the narrower
302 scope of constructs within these outcome domains compared to other outcome domains.

303 **Moderating Role of Methodological Artefacts**

304 Given our approach required combining a wide range of effects we sought to examine
305 the impacts and sources of heterogeneity occurring because of methodological artefacts.
306 Sources of heterogeneity was explored via subgroup meta-analysis with different study-level
307 characteristics as co-variates (eTable 4-8 supplementary). Together the models demonstrate
308 slight, but non-substantial sources of variance When sample size was the moderator, 40
309 significant moderation effects were identified (29.62% of 135 tested). Differences were found
310 across several outcomes suggesting that no outcomes were particularly vulnerable to systematic
311 variation associated with sample size. The direction of these moderation effects varied, but
312 most were positive indicating that larger samples were associated with stronger effect sizes.
313 The number of models affected by risk of bias was proportionally small (9.66% of 145 tested)

and there did not appear to be any systematic pattern of the effects of bias across the outcomes or correlates. When study design (longitudinal vs correlational) was the moderator, a small proportion of models indicated significant moderation (18.75% of 48 tested) with mixed effects. Significant moderations mostly occurred for PTSD and indicated that most, but not all, effects reduced in size for longitudinal designs. Of note, the association between potentially traumatic events and psychological distress and PTSD reduced for longitudinal study designs.

In a final set of sensitivity analyses we explored the original effect size type (eTable 6), whether the original models were bivariate or multivariate (eTable 7), and the number of covariates in the original models (eTable 8). Given the limited variation in the moderator, to permit model execution we used an inclusive thematic category grouping models by outcome (e.g., anxiety) and whether the correlate could be classified as a deployment-related resource (e.g., available social support) or demand characteristic (e.g., demanding deployment/role features). For transparency, we have included information about the number and proportion of effect sizes for each of the main meta-estimates in eTable 9. Among the more inclusive group of effects, the analysis comparing the different types of effect sizes extracted and streamlined illustrated a mixed pattern of results, where most of the effect sizes across anxiety, burnout, depression, PTSD, or psychological distress were minimally moderated by the type of effect size reported. Specifically, 50% of the models were associated with a significant moderating effect, within these results there was no consistent pattern in terms of direction (positive or negative impact), or magnitude (most of the moderation was minimal, ES<0.2).

Similarly, minimal, and sporadic effect moderation was associated with effect sizes that were drawn from multivariate or bivariate models (eTable 7), or from models that considered the number of covariates in the original models (eTable 8). These methodological moderation tests, in combination, did not demonstrate a dramatic influence, or clear pattern of bias that would threaten the the ability to streamline and meta-estimate the range of outcomes as an

aggregate. Specifically, only 33.33% (5/15 models tested) demonstrated a significant moderation effect associated with multivariate or bivariate models and only 42.86% (3/7 models tested) demonstrated a moderation effect associate with covariate number. While these results support the conversion of different effect sizes into a streamlined outcomes that can be combined, our ability to verify or refute any potential pattern of bias arising from this methodology is often limited by the sparse data across the range of outcomes (see eTable 9).

Publication Bias

Publication bias was assessed using Egger's regression (Egger et al., 1997). Regression coefficients were significant for studies exploring anxiety, burnout, depression, distress, and PTSD associated with several correlates (eTable 10; supplementary). Only 33 (22.44%) of the models that could be tested demonstrated significant asymmetry. In most cases, a corresponding trim and fill analysis (Duval & Tweedie, 2000) did not substantively change the magnitude or interpretation of the effect, except for 7 models (Funnel plots presented in eFigures 8-14; supplementary). The most substantial effects of publication bias occurred for PTSD and psychological distress, whereby most adjusted estimates reduced, and three estimates became non-significant. Design weaknesses and risks of bias across the domain are reported in eFigure 15 (supplementary).

Discussion

The study is the first attempt to gather, map, and compare available knowledge on military deployment outcomes. This includes 314 studies and 1,893 identified effects, covering a wide range of evidence investigated in the literature. This investigation supports previous suggestion that, in addition to potentially traumatic events, higher-frequency, non-traumatic stressors may also play a role in individual vulnerability and declines across mental ill-health, cognitive, and performance outcomes post-deployment (Booth-Kewley et al, 2010; Engelhard et al., 2007). Further, most correlates were associated with multiple outcomes in the same

direction. Specifically, individual differences in emotional (i.e., guilt/shame, anger and aggression) and cognitive processes (e.g., negative appraisals) and avoidance coping were cumulatively associated with greater mental ill-health outcomes. Although symptoms and emotional experiences (e.g., anger problems) are often screened post-deployment (Panaite et al., 2018) other emotional states (e.g., guilt/shame) and associated cognitions may also be targeted for screening as early markers of later functional deteriorations (Lee et al, 2001).

Adequate sleep on deployment was an important correlate. While many aspects of deployment that disrupt sleep are immutable, there may be modifiable opportunities to reduce sleep disruption or improve sleep quality (e.g., effective daily recovery routines that facilitate down-regulation; Toker & Melamed, 2017). Further, reducing the use of avoidance coping, and encouraging the flexible use of coping and stress recovery strategies, may be an important target for intervention.

The analysis also enabled a novel viewpoint about the similar and unique correlates across the outcomes. For example, the use of various coping/stress recovery strategies and negative appraisal had a relatively strong association with job performance *and* indices of mental health. However, job performance was also significantly associated with family and social dynamics (e.g., problematic family functioning, leadership support), infrequently researched. Physical demands were associated with several mental ill-health outcomes and poorer cognitive functioning. Environmental conditions, such as heat and cold stress, have a demonstrated effect on cognitive functioning (Taylor et al., 2016). Further, exposure to chemical agents or toxins may potentiate structural changes or inflammatory responses affecting cognition (Chen et al., 2015). This signals the need for future investigation into physical demands as potentially important correlates across outcomes, including cognitive function.

To put these findings into context, we compared previous meta-estimation efforts across the military deployment scholarship to the meta-estimates identified in this domain analysis (eTable 11). In so doing, three key points become evident. First, amongst the range of comparable meta-analyses, few explore deployment-related correlates with outcomes (n=3) and examined a limited range of correlates and outcomes. Second, amongst the available studies, the range of meta-estimates seem to be consistent in both magnitude and directionality to the results of the current domain analyses. Third, none of the published studies currently considers the multi-dimensional and cumulative psychological impact of key moderators. In contrast, the exploratory domain analysis approach increased coverage ($N_{outcomes}$=8, $N_{moderators}$=48), transitivity (connection of correlates to multiple outcomes), and articulated that key moderators can translate to cumulative effects across outcomes.

The moderation investigation of deployment types demonstrated that potentially traumatic events had a stronger association with psychological distress and PTSD in *non*-war-zone deployments. Previous research suggests that unpreparedness for traumatic events on deployment was a significant demand (Moore et al., 2020). In non-war-zone deployments, a lack of preparedness may relate to differences in deployment expectations or structural resources compared to war-zone deployments. Having noted this, research is needed to determine why these differences exist. Moderation analyses also suggest that effect sizes were influenced by study features, particularly sample size, and the potential risk of bias, suggesting the necessity for caution when interpreting some results. However, these effects were not prevalent or systematic within any one type of research stream. The investigation of the publication bias indicated small to moderate bias with a proportionally small number of models. Sensitivity tests aiming to correct for this bias did not substantially change the nature of the results in most cases.

Limitations and Future Directions

This approach provides insights about the relative strength, the cumulation of effects for certain correlates, and the identification of understudied and emerging topics in the literature, not possible without the streamlining of a range of effects into a low resolution, but large-scale, integrated pattern of results. However, there are limitations in this approach. First, the extraction and synthesis of a large volume of evidence into discrete themes, relied on an expert-led approach that is open to multiple viewpoints. While efforts were made to reach consensus and consistency in category formation and the categorization of effects, we recognize that alternative categories are possible. Second, a related limitation was the requirement to combine effects from adjusted and unadjusted models (van der Meulen et al., 2020) and the integration of different types of effects (Roth et al., 2018) which can raise issues in relation to increased heterogeneity. To address this challenge, we transformed all extracted effect sizes into a Fisher's *Z* statistic. Second, our sensitivity analyses exploring the impact of combining different effect size types from adjusted and unadjusted models suggested that while significant moderation effects could be observed, their effect on the meta-estimate was often minimal and inconsistent in direction. Taken together, we argue that the meta-estimates provided an inclusive, but consistent estimation of effects without an obvious pattern of systematic bias.

Third, a limited number of effect sizes contributed to some meta-estimates, particularly for the second-order themes. Thus, it may be appropriate to base interpretation of the research field on the first-order themes with a greater number of contributing effects. Fourth, we did not limit the analysis to longitudinal studies. Limiting the study inclusion to longitudinal studies would have undermined our study aims by constraining the number and diversity of correlates available for study.

Finally, lower resolution/high-scale synthesis is a trigger point for additional research. While outside the scope of the current paper, future contributions could provide a commentary

regarding theoretical considerations that underpin these findings, but also a more comprehensive analysis of current quality of studies in this scholarship, and unpacking domains with higher risk of bias.

Conclusion

Despite these limitations, a broad an inclusive mapping and comparison of topics identified in the analysis enables expert and non-expert readers to understand the breath of topics in the literature and the magnitude of different influences that shape outcomes post-deployment. We invite the readership to engage with the effects map, cataloguing hundreds of meta-estimates, in more detail.

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Studies included in the meta-analysis these are provided in eReferences (supplemental)

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Figure Captions:

Figure 1: PRISMA flow diagram of the study selection process

Figure 2: Tornado chart of the combined list of meta-analytical effects, displaying the cumulative sum of the available meta-estimates (Fisher's Z) within each of the second-order themes. This visualization aims to represent all known meta-analytical effects into a cumulative measure of effects (x axis) across each theme (y axis) and the comparison of each theme's association with multiple outcomes in cumulation.

Contributorship Statement: MC, DG and EK were involved in study conceptualisation and methodology. MC was responsible for project management, the initial literature search, funding acquisition, and original draft. GH, MK, AK, MC were involved in paper screening and data extraction. TR, AK and MC contributed to the thematic coding framework. EK was responsible for the formal analysis, figures, and table generation. All authors contributed to the data interpretation and review and editing of manuscript.

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Data sharing statement: The dataset that was used in this review will be made available by contacting the corresponding author on reasonable request for the initial two years post-publication. Thereafter, the dataset will be provided via the Open Science Framework website.

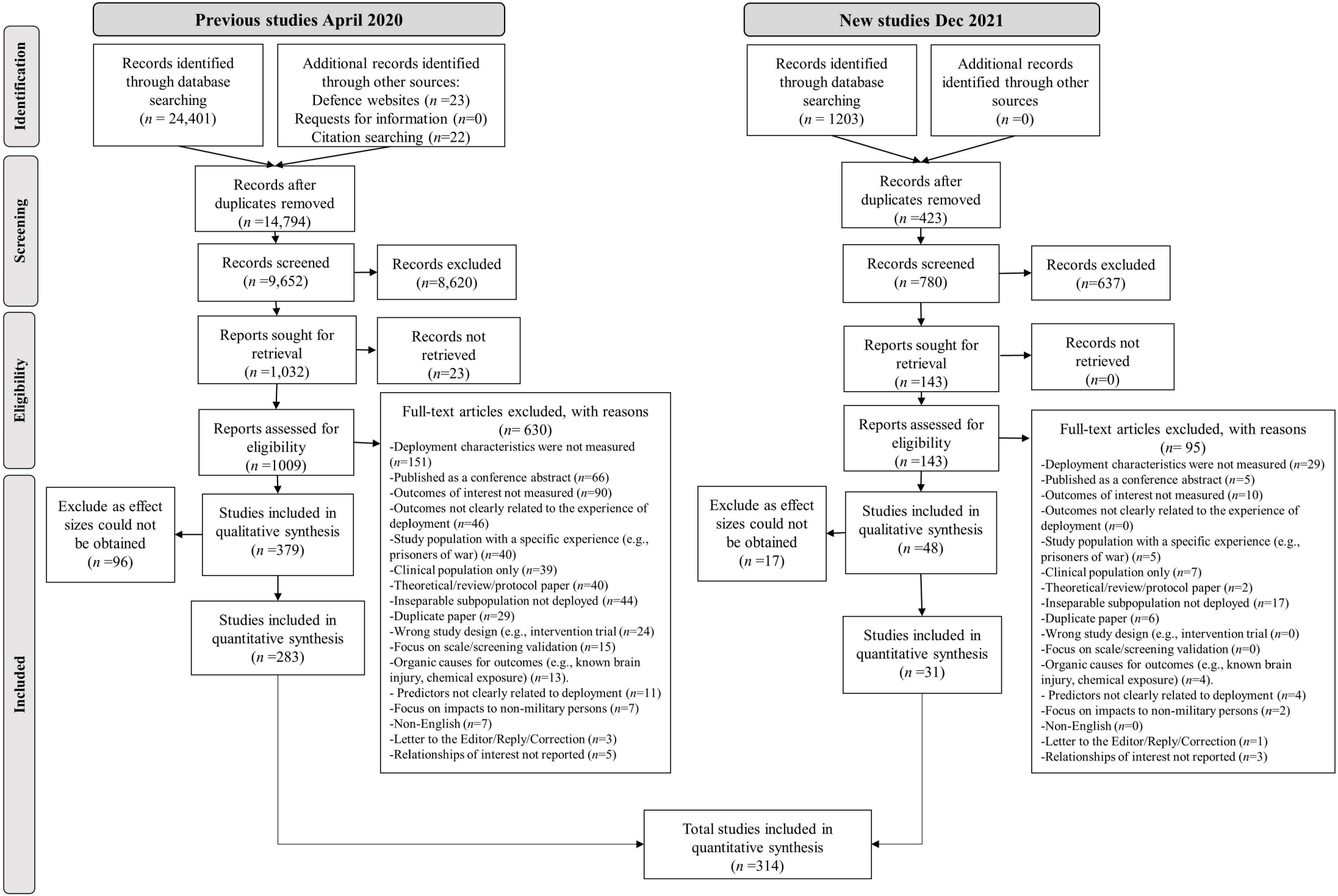


Figure 1: PRIMA flow diagram of the study selection process

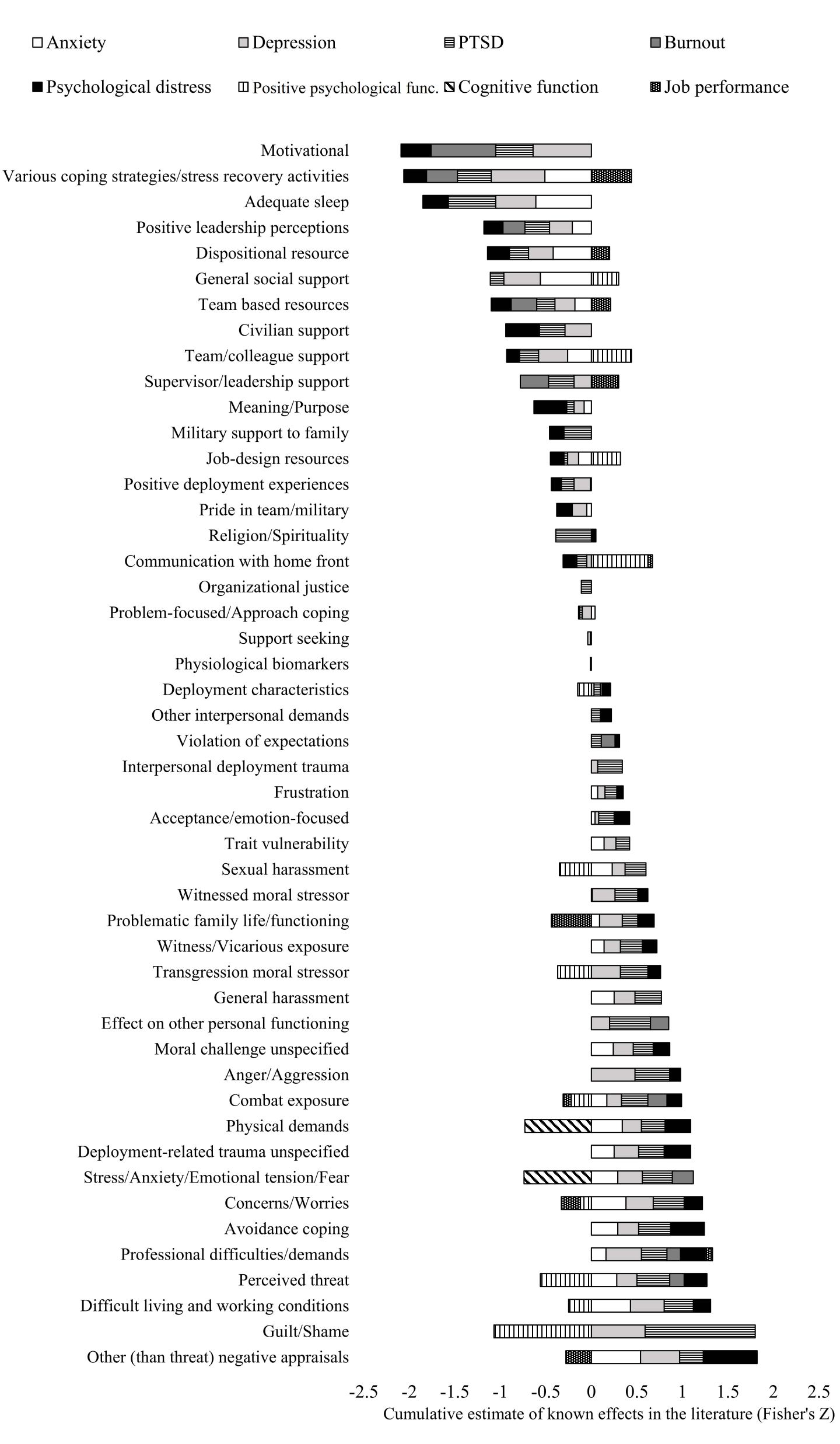


Figure 2. Tornado chart of the combined list of meta-analytical effects, displaying the cumulative sum of the available meta-estimates (Fisher's *Z*) within each of the second-order themes

Supplementary Online Content

Supplementary Methods

eMethods 1: Departures from the pre-registration protocol

We departed from the pre-registered protocol in the following ways. First, we originally planned to conduct a meta-analysis. However, the infrequency of studies in some theme categories meant that a meta-analysis was not suitable. Therefore, the decision was made to broadly canvas the entire field in an exploratory domain analysis to understand the current availability of research and promising area for future research. Second, after consultation with a librarian the search terms were enhanced for comprehensiveness (eMethod 2). Third, there was a 40%, rather than 30% overlap in the double screening of abstracts and a 50% overlap for data extraction between reviewers. Fourth, given the volume of studies, four rather than two members of the research team were involved in the extraction of data from primary studies. Fifth, we did not extract rank data, reliability estimates, or average length of service due to insufficient reporting in primary studies. Sixth, it was decided not to cluster deployment-related demands and resources into physical, cognitive or emotional themes as initially proposed because many of the demands and resources did not fall discretely into one of these categories (e.g., potentially traumatic events) and was therefore considered a less meaningful categorization. It was determined that by combining demands and resources in this way we were diluting the meta-estimate creating a less informative estimate. Similarly, individual-resources could not be clustered meaningfully into the three initially proposed categories (i.e., resilient beliefs, coping and emotion regulatory strategies and coping resources). Rather a different codification system was developed based on the extracted data. This codification resulted in a high number of different first and second-order themes allowing for greater resolution in estimation and were more

reflective of the extracted data (eMethod 5). Accordingly, it was infeasible to investigate the moderating role of these three categories of individual and deployment-related resources on the relationship between the like categories of job-demands and outcomes as initially proposed. Finally, analyses were performed in R, rather than STATA.

eMethod 2. Search terms used in database search

Population	Event	Outcomes
("Military veterans" OR	("Military Deployment" OR	(Depress* OR
"Military personnel" OR	Deploy* OR	Emotion OR
Veteran* OR	"Routine separation" OR	Adjust* OR
"Armed force*" OR	Postdeploy* OR	"Emotional adjustment" OR
"Armed service*" OR	Post-deploy* OR	Anxiety OR
Military OR	"Post deploy*") AND	Anxi* OR
"Navy personnel" OR		Wellbeing OR
Navy OR		Well-being OR
Naval OR		"Well being" OR
"Army personnel"		Resilien* OR
Army OR		"Psychological resilience" OR
"Air force personnel" OR		"Trauma Related Disorders" OR
"Air force") AND		Stress OR
		"Occupational stress" OR
		"Stress reaction" OR
		"Mental health" OR
		"Mental ill-health" OR
		Burnout OR
		"burn out" OR
		burn-out OR
		Fatigue OR
		"Compassion fatigue" OR
		Exhaustion OR

	"Posttraumatic stress disorder" OR PTSD OR "Quality of life" OR "Job performance" Performance OR "Task performance" OR "Cognitive failur*" OR "Cognitive function*" OR "Cognitive process*" OR "Cognitive control" OR "Sustained attention" OR "Visual Attention" OR Attention OR "Attention span" OR "Cognitive ability" OR Cognition OR Memory OR "Executive functioning")

eMethods 3. Definitions of Correlates

We anticipated that most studies identified would be based on cross-sectional, post-deployment, observational study designs. However, it was difficult to anticipate the potential predictors and correlates that may be available from a broad canvas of this scholarship. Therefore, we discussed some initial heuristics based on our collective knowledge of the field and a sub-sample of themes that were refined as more papers were examined and via ongoing discussion. Using the transactional models of stress and coping, models of resilience, and the job-demands resources model as guiding frameworks, we selected correlates of deployment outcomes based on whether these were operationalized as job, organizational, social, or individual psychological features measured in relation to the deployment. The list of example correlates can be found in eMethod 5

including how they were coded by the research team into first and second-order themes. For example, in individual psychological features were the potentially protective/vulnerability factors that may determine individual differences in peri or post-deployment outcomes (e.g., cognitive and behavioral efforts to manage deployment demands; Lazarus & Folkman, 1984), social features considered were any positive and negative aspects of the social context (e.g., support from families while on deployment), or job-design features are the negative or positive aspects of the job or role such as processes, tasks, responsibilities on deployment (e.g., physical/psychological/cognitive demands, decision-making autonomy), and organizational features were any negative or positive features of the organization that were considered to influence deployment outcomes (e.g., organizational support for families).

eMethod 4. Determination of Coding Scheme

Once the final dataset was determined, a coding framework (eMethod 5) was developed to group the effect sizes that were sensible to combine considering similarities and differences between measured constructs. We aimed to thematically group correlates and outcomes in a way that mirrored the terms used in the literature, with minimal interpretation, reclassification, or merger of categories. Three authors with expertise in organizational, clinical, and military psychology [blind for review] were involved in the development of the coding scheme that included a hierarchy of themes. Correlates were clustered into first-order (more inclusive) and second-order (more specific) themes where possible to permit analysis at different levels of category specificity. For correlates, the first-order theme captured the broad-level of conceptual similarity between clusters of second-order themes. Second-order themes were created to capture conceptual divergence in the first-order themes when there was the

necessity to reflect more nuanced differences. Outcomes were grouped into eight categories reflecting similarity in the concept being measured.

eMethod 5 provides all correlates and outcome themes and examples found in the dataset.

eMethod 5. Coding scheme for correlates and outcomes. Note: (r) denotes the reversal of the scale.

First-order themes	Second-order themes	Examples found in dataset
Potentially traumatic events	Direct combat exposure	Killing, discharge weapon, number of combat exposure, being under fire, injured in combat
	Witness/vicarious exposure	Aftermath of battle, exposure to casualties, exposure to death, body handling, observed destruction
	Interpersonal deployment trauma	Sexual assault/ trauma on deployment
	Deployment-related trauma unspecified	General deployment-related trauma experience
Moral challenge	Witnessed moral stressor	Potentially morally injurious events, moral objection, human degradation, exposure to starvation, atrocities and abusive violence, moral betrayal by others
	Transgression moral stressor	Action/inaction resulting in injury/death of others, act of commission, broke personal rules/moral code, insufficient possibilities to intervene
	Moral challenge unspecified	Moral challenges broadly measured
Demanding deployment/role features	Deployment characteristics	Length of deployment, deployed as augmentee
	Difficult living and working conditions	General deployment stressors, lack of privacy, daily hassles, malevolent environment, lack of things to do
	Physical demands	Heat distress, muscle tension/strain, exposure to toxins, chemicals, nuclear, lack of food/water, muscle / physical fatigue.
	Violation of deployment expectations	Breach of psychological contract, deployment longer than expected, actual role vs expectation violation

Professional difficulties		Medical role demands, peacekeeping demands/stressors, professional stressors, number of professional demands, work stressors, career issues
Interpersonal demands	Sexual harassment	Sexual harassment scale assessing exposure to unwanted sexual contact or verbal conduct of a sexual nature from other unit members, commanding officers, or civilians in the war zone.
	General harassment	Deployment Risk and Resilience Inventory general harassment sub-scale measuring perceived harassment from unit members.
	Other interpersonal demands	Cultural demands, interpersonal stressors, cultural stressors, hostility from civilians
Negative appraisals	Perceived threat	Perceived threat, awareness in danger, perceived to be in danger
	Other negative appraisals	Meaninglessness of deployment, powerlessness, negative appraisals of peacekeeping, negative impact, loss appraisal, self-blame
Negative affective states	Frustration	Frustration with the deployment civilian population or country, frustration associated with overseas military duty, frustration with peacekeeping
	Stress/Anxiety/tension/Fear	Professional stress, perceived stress, anxiety/tension, emotional stress exposure, fear, fear of trauma, fear of injury
	Anger/Aggression	Perceived anger or aggressive behaviours
	Guilt/shame	Perceived guilt and shame reactions (e.g., “I wish I could ‘make things right’”).
	Concerns/worries	Concerns about being homesick, concern about communication, concern about problems back home, concern about leadership, concern about family disruption
Work/life interference	Problematic family life/functioning	Objective home front stressors, subjective home front stressors, family expectations, home demands, marital dysfunction.
	Effect on other personal functioning	Perceived negative deployment related financial impacts, career impacts, other personal matters.
Dispositional vulnerabilities	Trait vulnerability	Trait anxiety, anxiety sensitivity, experiential avoidance, negative temperament

	Biological vulnerability	Chronic stress (hair), cortisol stress reactivity, basal cortisol, basal testosterone, testosterone reactivity
Organizational resources	Organizational justice	Perceived organizational justice
	Support for families	Sufficient support to family, military support to spouse/partner
Job-design resources		Job control, autonomy, personal development, lack of recognition (r), lack of control, military/deployment preparedness, task coherence, mission ambiguity (r), matched to trade experience, poor equipment (r)
Availability of social support	Civilian support	Family support, community support
	Colleague/peer support	Approachable if have a problem, unit support, team support
	Leader/supervisor support	Health promoting leadership, sleep leadership
	General support	Social support, lack of social support (r)
Positive appraisal of deployment/service	Meaning/purpose	Belief in mission, appreciation of country/life, value of work, value of operations, value of service, engagement in meaningful work, meaninglessness (r)
	Positive deployment experiences	Positive cultural experience, positive peacekeeping experiences, positive aspects of mission, positive aspects of service, benefit finding, challenge appraisals, personal development
	Pride military/team	Military pride, unit pride, Army pride
Interpersonal resources	Positive leadership/supervisor perceptions	Positive leadership, positive leadership environment, satisfaction with leadership, transformational leadership, confidence in company/unit commander, supervisor respect
	Team-based resources	Cohesion, team morale, deployed with unit, sense of comradeship, confidence in unit, team respect, supporting the team, unit relationship quality
Self-regulatory strategies	Acceptance/emotion-focused	Religious coping, thought reappraisal, positive thinking, acceptance
	Problem-focused/ approach coping	Approach coping, problem focused, restraint coping
	Support-seeking	
	Avoidance coping	Avoidance, drug use, substance use, disengagement, denial, alcohol use

	Various coping strategies/ stress recovery activities	Stress coping, self-care
Other coping resources	Adequate sleep	Sleep quality, Hours of sleep, sleep difficulty (r), sleep deficit (r), difficulty staying asleep (r), difficulty falling asleep (r)
	Dispositional	Optimism, hardiness, commitment, trait resilience, emotional stability, self-efficacy
	Motivational	Organizational commitment, job engagement, personal morale
	Religion/spirituality	Religious commitment, religiosity
	Communication with home front	Quality of communication, frequency of communication, access to social media

Outcome themes	**Examples**
PTSD	PTSD symptom severity, PTSD diagnosis, secondary trauma symptoms, sub-categories of PTSD symptoms (e.g., re-experiencing, intrusions, avoidance, dysphoria, emotional numbing, hyper-arousal)
Anxiety	Panic diagnosis, anxiety diagnosis, anxiety risk, anxiety symptom severity,
Depression	Depression symptom severity, depression risk, depression diagnosis
Burnout	Burnout and burnout dimensions (e.g., exhaustion, depersonalisation, cynicism, emotional job strain)
Psychological distress	Global measures of psychological distress and psychological functioning: K10, OQ-45, 53-item Global Severity Index, 9-item General Distress subscale of the ADDI-27; 12-item General Health Questionnaire (GHQ-12); Veterans RAND Short- Form (VR-12); DASS 21; Brief Symptom Inventory (BSI), Psychological/mental health problem unspecified, comorbid psychological issues, unspecified psychiatric symptoms, unspecified mood disorder,
Positive psychological functioning	Connor–Davidson Resilience Scale, Ego Resiliency Scale, wellbeing, positive functioning
Job performance	Work impairment (r), poor performance (r), perceived mission readiness
Cognitive function	Researcher administered assessments of cognitive functioning, self-assessments of cognitive failures

eMethods 6. Risk of bias assessment tool.

	Score			
Criteria	**0**	**1**	**2**	**3**
1. Design of the study	Unable to determine	Cross-sectional (peri or post deployment)	Longitudinal retrospective, group comparison, mixed	Longitudinal prospective
2. Power analysis	No power analysis reported	Mentions power-analysis, but not detail provided	Power analysis provided	
3. Sample representativeness	Not addressed	Minimally raises and addresses sample representativeness in some way (e.g., sample stratification, weighting or sensitivity analyses that examine the representation of a sample within a target population)		
4. Reporting missing data	Extent of missing data not reported	Extent of missing data reported		
5. Addressing missing data	Not reported	No attempt to address missing data	Attempt to address missing data (e.g., mean replacement, imputation, bootstrapping)	
6. Measurement of outcomes	Cannot determine or measurement approach not reported	Measure developed for study	Standardised/validated measures used	
7. Equality in length of outcome follow-up.	Cannot determine or length of follow-up from deployment not reported.	Follow-up period varies across participants (3+ months)	Follow-up period the same for all participants (< = 3 months)	
8. Source of funding disclosed	Funding source not reported	Funding source reported		

eMethods 7. Data aggregation and conversion of effects

To streamline the range of studies into an inclusive analysis we took the following steps. First, effects from studies with multiple types of outcomes (e.g. anxiety and burnout) were separated into different sub-themes and analysed in separate outcome models. Our data extraction methodology aimed to simplify the representation of predictors with multiple timepoints, or multiple sub-categories reported, with a single reported effect that most simply, and clearly represents the relationship (e.g., job-performance ratings peri or immediately post-deployment). For themes with a small number of collated estimates (2≤ number *ES* ≤4) a two-level model was employed (i.e., fixed and random effects). Themes with a larger number of estimates, where multiplicity could not be easily reduced (~25% of studies), multiple effects were retained and modelled with three-level random effects models. Third, all extracted effects (i.e., odds ratio, hazard ratio, percentage, standardized mean differences, standardised model coefficients, correlations) were transformed into a Fisher Z's metric to allow comparability between the various effect sizes. Formulas for achieving conversions to correlation coefficients were derived from Polanin and Snilstveit (2016) provided in eMethods 8. Studies that reported insufficient statistical detail to achieve precise conversion into Fisher's Z were converted into the most proximal available metric.

eMethods 8. Formulas for achieving conversions to correlation coefficients (Polanin & Snilstveit, 2016)

	Mean standardized	**Odds ratio**
Correlation coefficient	$r = \left(\frac{d}{\sqrt{\left(d^2 + \frac{(n1+n2)^2}{(n1*n2)}\right)}}\right)$	$r = \left(\frac{Log(OR) * \left(\frac{\sqrt{3}}{\pi}\right)}{\sqrt{\left(\left(Log(OR) * \left(\frac{\sqrt{3}}{\pi}\right)\right)2 + \frac{(n1+n2)^2}{(n1*n2)}\right)}}\right)$

eTable 1: Details of studies included in the domain analysis

Study Identifier	Authors	Origin country	Deployment location	Total sample size (N)	Study design	Publication type	Deployment type	Population	% males	Age information	Second-order risk/vulerabiliy themes	Second-order resources/protective factor themes	Outcome construct	Outcome measurement instrument	Outcome measurement method	Bias rating (of 14)	Alignment to aims of domain-analysis
1	Abbas (2019)	USA	Iraq	336	Longitudinal, prospective	Thesis	not specified	National Guard	84	Mean age: 27.1	Combat exposure, Witness/vicarious exposure	Team/colleague support	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	8	yes
2	Acheson et al., (2019)	USA	Iraq/Afghan	2,404	Longitudinal, prospective	Peer-Review	Combat/war zone	Marines	100	Mean age: 22.77	Deployment-related trauma unspecified	Not applicable	PTSD (re-experiencing symptoms)	Clinician Administered PTSD Scale, DSM-IV Version (CAPS; Blake et al., 1995).	Clinical assessment	9	no
3	Adams et al., (2016)	USA	Iraq/Afghan	42,397	cross-sectional	Peer-review	Combat/war zone	Army	0	Age range: 17-40+	Combat exposure	Not applicable	PTSD, Depression	4-item tool from the Primary Care PTSD Screen (Bliese et al., 2008; Prins & Ouimette, 2004); Patient Health Questionnaire 2 item (PHQ-2; Kroenke, Spitzer, & Williams, 2001).	Self-report	8	yes
4	Adler et al., (1996)	USA	Iraq	4,199	cross-sectional	Peer-review	Combat/war zone	Army	Not provided	Mean age:25.8	Witness/vicarious exposure	Not applicable	PTSD symptom clusters	Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1978); Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982).	Self-report	7	yes
5	Adler et al., (2005)	USA	Hungary/Bosnia-Herzegovina/ Croatia	3,339	cross-sectional	Peer-review	Peacekeeping	Army	63	Not specified	Deployment characteristics	Not applicable	PTSD, Depression	The Post-Traumatic Stress Scale (Bartone, Vaitkus, & Adler, 1994); The Zung Self-Rating Depression Scale (SDS; Zung, 1965)	Self-report	6	no
6	Adler et al., (2011)	USA	Iraq/Afghan	1,051	Longitudinal, retrospective	Peer-review	Combat/war zone	Army	96	Not specified	Combat exposure, Perceived threat, Witness/vicarious exposure, Witnessed moral stressor	Positive deployment experiences	PTSD	Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993).	Self-report	8	no
7	Adler et al., (2017)	USA	Afghan	344	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Reserve (Medical Personnel)	58.8	age range: 18-40+	Professional difficulties/demands , Stress/Anxiety/tension/fear, deployment characteristics	Positive leadership perceptions, Supervisor / leadership support, Team-based resources, Various coping strategies/ stress recovery activities/ stress	Burnout, PTSD	Emotional Exhaustion and Depersonalisation Subscales of the abbreviated Maslach Burnout Inventory - Human Services Survey Version (aMBI; McManus et al., 2002; McManus et al., 2003; Posttraumatic Checklist Civilian Version (PCL-C; Weathers et al., 1994).	Self-report	4	yes
8	Adrian et al., (2018)	USA	Afghan	627	Longitudinal, retrospective	Peer-review	Combat/war zone	Army	Not provided	Age range: 18-40+	Combat exposure	Not applicable	Depression	Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	9	no

9	Andersen et al., (2014)	Denmark	Afghan	561	Longitudinal, prospective	Peer-review	not specified	Army	Not provided	Not specified	Combat exposure, Perceived threat, Stress/Anxiety/tension/fear	Not applicable	PTSD	17-items from Posttraumatic Stress Disorder Checklist, Civilian Version (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996).	Self-report	12	yes
10	Anderson et al., (2019)	USA	Afghan	4,645	Longitudinal, prospective	Peer-review	Combat/war zone	Army	Not provided	Mean age: 26.94 years (SE = 0.18)	Stress/Anxiety/tension/fear	Not applicable	PTSD, Depression, Anxiety	6-item Posttraumatic Stress Disorder Checklist (PCL; Wilkin et al., 2011); Composite International Diagnostic Interview screening scales (CIDI-SC; Kessler & Ustun, 2004).	Self-report	9	yes
11	Anestis et al., (2017)	USA	not specif	292	cross-sectional	Peer-review	not specified	National Guard	83.7	Mean age: 28.65	Combat exposure	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist Military (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	4	yes
12	Arcury-Quandt et al., (2019)	USA	not specif	598	Longitudinal, prospective	Peer-review	not specified	Navy, Marines	71.2	Mean age: 26.3	Combat exposure	Not applicable	Depression	Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977).	Self-report	11	no
13	Arincorayan (2000)	USA	Bosnia/Croatia	1,001	cross-sectional	Thesis	Peacekeeping	Army	100	Mean age: 26.8	Not applicable	Acceptance/emotion-focused, Positive leadership perceptions, Problem-focused/Approach coping, Team/colleague support	Psychological distress	Brief Symptom Inventory of the Symptom Checklist Revised (Deragotis & Savitz, 1999).	Self-report	7	no
14	Armed Forces Health Surveillance Center (2012)	USA	Iraq/Afghan	154,548	cross-sectional	Report (GOVT/NGO)	Combat/war zone	Army, Navy, Air Force, Marines, Coast Guard	0	Not specified	Deployment characteristics	Not applicable	Mood disorder, Anxiety, dissociative and somatoform disorders, adjustment disorder, PTSD	International Classification of Diseases 9th revision diagnostic code for episodic mood disorders, anxiety, dissociative and somatoform disorders, and posttraumatic stress disorder (Centers for Disease Control and Prevention).	Clinical assessment	4	no
15	Armistead-Jehle et al., (2011)	USA	Iraq	330	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Marines	100	Mean age: 22	Combat exposure, Anger/aggression	Team-based resources	PTSD, Depression	Posttraumatic Checklist Civilian Version (PCL-C; Weathers et al., 1993); 4-items from the Post-Deployment Psychological Short Screen (PDPS; Bliese, Wright, Adler, & Thomas, 2004).	Self-report	8	yes
16	Armstrong et al., (2014)	USA	not specif	194	cross-sectional	Peer-review	Combat/war zone	Air Force (Pararescuemen)	100	Mean age: 30.38	Combat exposure, Witness/vicarious exposure	Team/colleague support	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 1993); 9-item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001).	Self-report	8	yes

17	Ashley (2017)	USA	not specif	81	cross-sectional	Thesis	not specified	Army, Navy, Air Force, Marines, National Guard	60.5	Mean age: 46	Combat exposure, Witness/vicarious exposure, Perceived threat	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Huska, & Keane, 1994).	Self-report	10	no
18	Asnaani et al., (2014)	USA	Iraq/Afghan	168	cross-sectional	Peer-review	not specified	National Guard	93	Mean age: 34.1	Combat exposure	Not applicable	Depression, PTSD, Mental health functioning	53-item Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983); Clinician Administered PTSD Scale (Blake et al., 1995); Veterans Health Survey SF-36 (Jenkinson et al., 1994).	Self-report	3	no
19	Aupperle et al., (2013)	USA	Iraq/Afghan	32	cross-sectional	Peer-review	not specified	Military personnel	100	Mean age: 29.19	Combat exposure	General social support	PTSD, depression	Clinician Administered PTSD Scale (Blake et al., 1995); Patient Health Questionnaire (Spitzer et al., 1999).	Self-report and clinical assessment	5	no
20	Aversa et al., (2014)	USA	Middle East	249	cross-sectional	Peer-review	Combat/war zone	Military personnel (separated from the military and active duty soliders)	100	Mean age: 29	Combat exposure	Not applicable	PTSD, Depression	Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995); 17-item Hamilton Depression Rating Scale (HAM-D; Hamilton, 1960).	Self-report	7	no
21	Bailey (2010)	Swedish	Iraq	366	cross-sectional	Thesis	not specified	Army, National Guard, Reserves	88.25136612	Mean age: 25	Combat exposure	Acceptance/emotion-focused, Acceptance/emotion-focused , Meaning/purpose	Psychological distress, PTSD	45-item Outcome Questionnaire (OQ-45; Lambert, Lunnen, Umphress, Hansen, & Burlingame, 1994); Trauma Screening Questionnaire (TSQ; Brewin, Rose, Andrews, Green, Tata, McEvedy, Turner, & Foa, 2002).	Self-report	4	yes
22	Balderrama-Durbin et al., (2013)	USA	Iraq	76	cross-sectional	Peer-review	Combat/war zone	Air Forces	92	Mean age: 27.9	Combat exposure	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist Military (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	6	no
23	Banducci et al., (2019)	USA	Iraq/Afghan	2,344	cross-sectional	Peer-review	not specified	Army, Navy, Marines, Coast Guard	48.5	Mean age: 35.64	Problematic family life/functioning, Combat exposure, Interpersonal deployment trauma	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 1991).	Self-report	5	yes
24	Barr et al., (2019)	USA	Iraq	485	cross-sectional	Peer-review	Combat/war zone	Separated from military	81.65	Age range: 21-60+	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers et al., 2013); Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	8	no

25	Barrera et al., (2013)	USA	Iraq/Afghan	1,740	cross-sectional	Peer-review	not specified	Military personnel	Not provided	Mean age:29.43	Combat exposure, Witness/vicarious exposure	Not applicable	PTSD, panic	VA's electronic Clinical Patient Record System.	Clinical assessment	3	no
26	Bartone (1999)	USA	Persian Gulf (Saudi Arabia or Kuwait)/Germany	787	cross-sectional	Peer-Review	not specified	National Guard	55	Mean age: 34	Combat exposure	Dispositional resource	Psychological distress, Global severity index	20-item symptom checklist derived from various studies of soldiers (Bartone, Ursano, Wright, & Ingraham, 1989; Stouffer et al., 1949); the Global Serverity Index of the Brief Symptom Inventory (Derogatis & Melisaratos, 1983).	Self-report	4	yes
27	Bartone et al., (1998)	USA	Former Yugoslavia	128	Longitudinal, prospective	Peer-review	Peacekeeping	Army	82	Mean age: 30	Physical demands, Concerns/worries	Not applicable	Depression, Psychiatric symptoms	11-item Center for Epidemiological Studies Depression Scale (Radloff, 1977; Ross & Mirowsky, 1984); 20 items scale of psychiatric symptoms based on World War II studies (Bartone et al., 1989).	Self-report	10	yes
28	Bartone et al., (2020)	USA	Afghan	357	cross-sectional	Peer-review	Combat/war zone	National guard	100	Mean age: 28.31 (SD = 7.63).	combat exposure	Dispositional resources	Depression	Patient Health Questionnaire (PHQ-2; Spitzer et al., 1999).	Self-report	6	yes
29	Berntsen et al., (2015)	Denmark	Afghan	218	Longitudinal, prospective	Peer-Review	Combat/war zone	Military personnel	93	Mean age: 25.58	Combat exposure	Not applicable	PTSD	17-items from Posttraumatic Stress Disorder Checklist, Civilian Version (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Weathers et al., 1994).	Self-report	8	no
30	Bhalla et al., (2018)	USA	not specif	221	Longitudinal, retrospective	Peer-review	not specified	Army	100	Mean age:32.55	Combat exposure, Transgression moral stressor, Witnessed moral stressor	Not applicable	PTSD symptom clusters	Posttraumatic Stress Disorder Checklist – Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993)	Self-report	8	no
31	Black et al., (2004)	USA	Iraq	3,695	cross-sectional	Peer-review	Combat/war zone	Military personnel	>50.00	Majority 50% + were 25 years or younger	Combat exposure	Job-design resources	Anxiety	PRIME-MD Spitzer et al., 1994).	Self-report	7	no
32	Blackburn et al., (2016)	USA	Iraq/Afghan	191	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard	86	Mean age: 31.49	Combat exposure	Dispositional resource	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	4	yes

33	Bliese et al., (2001)	USA	Haiti	3,205	cross-sectional	Peer-review	Peacekeeping	Army	94	Mean age: 26.16	Difficult living and working conditions	Not applicable	Depression	6-item Brief Symptom Inventory Depression Subscale (BSI)a shorterned version of the SCL-90 (Derogatis, 1977; Derogatis & Melisaratos, 1983).	Self-report		5	yes
34	Bolton (2001)	USA	Somalia	426	Longitudinal, retrospective	Thesis	Peacekeeping	Military personnel	Not provided	Mean age: 26.85	Combat exposure, Professional difficulties/demands	Not applicable	PTSD, Depression	Mississippi Scale for PTSD (Keane, Caddell, & Taylor, 1988); 17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		7	no
35	Bolton et al., (2002)	USA	Somalia	1,023	Longitudinal, retrospective	Peer-review	Peacekeeping	Military personnel	90	Mean age: 26.68	Combat exposure, Professional difficulties/demands	Not applicable	PTSD	Standardized total severity scores on the PTSD Checklist (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Weathers, Litz,Herman, Huska, & Keane, 1993) and the Mississippi Scale (Keane, Caddell, &Taylor, 1988) and averaging them.	Self-report		9	no
36	Bolton et al., (2006)	USA	Somalia	522	Longitudinal, retrospective	Peer-review	Peacekeeping	Military personnel	89	Mean age:26.8	Combat exposure, Professional difficulties/demands	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard et al., 1996; Weathers et al., 1993); 35-item Mississippi Scale for PTSD (Keane et al., 1988).	Self-report		7	no
37	Booth et al., (2021)	USA	Liberia	173	cross-sectional	Peer-review	Humanitarian	Army	88	Age range: 18-40+ years	Not applicable	positive leadership perceptions	PTSD, anxiety, depression, burnout	17-item Posttraumatic Stress Disorder Checklist for DSM-IV (PCL-C; Weathers et al., 1993);	Self-report		8	yes
38	Booth-Kewley et al., (2010)	USA	Iraq/Afghan	1,569	cross-sectional	Peer-review	Combat/war zone	Marines	95	Age range: 18-27+	Combat exposure, Difficult living and working conditions	Not applicable	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		4	yes
39	Booth-Kewley et al., (2012)	USA	Iraq/Afghan	1,560	cross-sectional	Peer-review	Combat/war zone	Marines	94.9	Age range: 18-27+	Combat exposure, Difficult living and working conditions, Concerns/worries	Not applicable	Depression, Anxiety	10-item Center for Epidemiologic Studies Depression Scale (CES-D-10) (Andresen et al.,1994); 7-item anxiety scale used in the Department of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel (Bray et al., 2006).	Self-report		5	yes
40	Booth-Kewley et al., (2013)	USA	Iraq/Afghan	1,113	cross-sectional	Peer-review	Combat/war zone	National Guard	96	Age range: 18-27+	Difficult living and working conditions, Combat exposure	Positive deployment experiences, Positive leadership perceptions, Team-based resources	Mental health diagnosis	Medical Records from Standard Inpatient Data Record, Standard Ambulatory Data Record, and Health Care Service Record files via TRICARE Management Activity	Administrative records		5	yes

41	Born et al., (2019)	Canada	Afghan	972	cross-sectional	Peer-review	not specified	Army, Navy, Air Force, Reserve	90.7	Mostly 25–34 (43.8%)	Deployment-related trauma unspecified, Combat exposure, Witness/vicarious exposure	Not applicable	PTSD, Depression, Anxiety	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1994); Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME MD) Patient Health Questionnaire (PHQ; Spitzer et al., 1999).	Self-report	8	yes
42	Bourque (2013)	USA	Kuwait/Iraq	1,824	cross-sectional	Thesis	Combat/war zone	Army	92	Mostly 18 - 24 years of age (51%)	Combat exposure, Perceived threat	Acceptance/emotion-focused, Positive leadership perceptions, Problem-focused/Approach coping, Team-based resources	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	7	yes
43	Brady et al., (2017)	USA	not specif	382	cross-sectional	Thesis	not specified	Military personnel	89.3	Mean age: 38.4	Combat exposure	Not applicable	PTSD	4-items from the Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 1991).	Self-report	8	no
44	Bramsen et al., (2000)	Netherlands	Yugoslavia	572	Longitudinal, prospective	Peer-review	Peacekeeping	Army	100	Mean age:21.8	Deployment-related trauma unspecified	Not applicable	PTSD	22-item Self-Rating Inventory for PTSD (Hovens et al., 1994).	Self-report	8	no
45	Bravo et al., (2018)	USA	Middle East	101	Longitudinal, prospective	Peer-review	not specified	Navy	71.3	Mean age: 28.34	Professional demands, Professional difficulties/demands	Not applicable	Depression	Short Form of the Center for Epidemiologic Studies Depression Scale (CESD-10; Kohout, Berkman, Evans, & CornoniHuntley, 1993).	Self-report	10	yes
46	Breeden et al., (2018)	USA	not specif	18,012	cross-sectional	Peer-Review	Combat/war zone	Air Force	0	Age range: 18-55+	Combat exposure	Not applicable	PTSD	Primary Care Posttraumatic Stress Disorder Screen (PC-PTSD; Prins et al., 2003).	Self-report	5	yes
47	Bridger et al., (2011)	UK	not specif	2,596	Longitudinal, prospective	Peer-review	not specified	Navy	Not provided	Age range: <25-35+	Difficult living and working conditions	Job-design resources, Motivational, Various coping strategies/ stress recovery activities	Psychological distress	12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988).	Self-report	8	yes
48	Britt et al., (2003)	USA	Bosnia	1,181	cross-sectional	Peer-review	Peacekeeping	Army	92	Not specified	Professional difficulties/demands , Problematic family life/functioning	Motivational, adequate sleep	Psychological distress	53-item Global Severity Index (GSI; Derogatis, 1993; Derogatis & Melisaratos, 1983).	Self-report	7	yes

49	Britt et al., (2007)	USA	Kosovo	1,685	longitudinal, retrospective	Peer-review	Peacekeeping	Army	93	Mean age: 26	Effect on other personal functioning	Meaning/purpose, Motivational, Positive deployment experiences, Team-based resources	PTSD, depression	17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard et al., 1996; Weathers et al., 1993); 7-item Center for Epidemiological Studies—Depression Scale (CES-D; Radloff, 1977).	Self-report	5	yes
50	Britt et al., (2013)	USA	Iraq	641	longitudinal, retrospective	Peer-review	Combat/war zone	Army	Not provided	Not specified	Combat exposure, Stress/Anxiety/tension/fear	Team/colleague support, Team-based resources	PTSD	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Blanchard et al., 1996).	Self-report	7	yes
51	Britt et al., (2021)	USA	Afghan	1,222	Longitudinal, prospective	Peer-review	Combat/war zone	Army	96	Not specified	combat exposure	Team based resources, dispositional resources	PTSD	PTSD Checklist (PCL; Blanchard et al., 1996)	Self-report	7	yes
52	Britt, Adler, et al., (2017)	USA	Iraq/Afghan	3,046	cross-sectional	Peer-review	Combat/war zone	Army	Not provided	Age range: 18-40+	Combat exposure, Other negative appraisals	Acceptance/emotion-focused, Team-based resources	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Bliese, Wright, Adler, Thomas, & Hoge, 2008); 9-item Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, & Williams, 1999).	Self-report	6	yes
53	Britt, Herleman, et al., (2017)	USA	Iraq/Afghan	477	Longitudinal, retrospective	Peer-review	Combat/war zone	Army	99	Not specified	Combat exposure, Witness/vicarious exposure	Positive deployment experiences	PTSD	Posttraumatic Stress Disorder Checklist, specific stressor version (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Bliese et al., 2008)	Self-report	9	yes
54	Brownlow et al., (2018)	USA	Middle East	21,499	cross-sectional	Peer-review	Combat/war zone	Army	88.2	Mean age: 29	Deployment-related trauma unspecified	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	4	no
55	Bryan et al., (2011)	USA	Iraq	348	cross-sectional	Peer-review	Combat/war zone	Air Force (USAF Security Forces)	89.7	Mean age: 24.44	Witness/vicarious exposure, Combat exposure	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993)	Self-report	4	no
56	Bryan et al., (2015)	USA	Iraq	168	Longitudinal, prospective	Peer-review	Combat/war zone	Air Force	87.1	Mean age: 26.27	Combat exposure	Not applicable	Depression, PTSD	9-item Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001); 17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	11	yes

57	Bryan, Hernandez, et al., (2013)	USA	Iraq	348	cross-sectional	Peer-review	Combat/war zone	Air Force (USAF Security Forces)	89.7	Mean age: 24.5	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); 5-item depression subscale of the Behavioral Health Measure-20 (BHM; Kopta & Lowry, 2002).	Self-report	6	no
58	Bryan, McNaughton-Cassill, et al., (2013)	USA	Iraq/Afghan	252	cross-sectional	Peer-review	not specified	Air Force	81.7	Mean age: 25.99	Combat exposure, Witness/vicarious exposure	Not applicable	Psychological distress	9-item General Distress subscale of the ADDI-27 (Osman et al., 2011)	Self-report	6	no
59	Burr et al., (1993)	USA	Persian Gulf	104	cross-sectional	Peer-review	not specified	Navy	Not provided	Mean age: 25.5	Physical demands, Stress/Anxiety/tension/fear	Not applicable	Cognitive functioning	Mental Strain sub-scale from the 52-item Environmental Symptoms Questionnaire (ESQ; Kobrick & Sampson, 1979).	Self-report	4	yes
60	Bush et al., (2011)	USA	Iraq/ Afghan	5,302	cross-sectional	Peer-review	Combat/war zone	Army, Marines	89.4	Mean age: 28.1	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist Civilian Version (PCL-C; Forbes et al., 2004); Subscale from the Behavior and Symptom Identification Scale (BASIS-24; Eisen et al., 2006).	Self-report	5	yes
61	Cabrera, et al., (2021)	USA	Afghan	1,142	Longitudinal, prospective	Peer-review	Combat/war zone	Army	93.7-96.2	age range 18-40+ years	combat exposure, difficult living and working conditions	Not applicable	Psychological distress	16-item PHQ-ADS (Kroenke et al., 2016) combines depression and anxiety items from the PHQ-9 and the GAD-7	Self-report	9	no
62	Callahan (2006)	USA	Iraq	210	cross-sectional	Thesis	not specified	Army	98	Mean age: 30	Combat exposure	Dispositional resource, Positive leadership perceptions, Pride in team/military, Team-based resources	Anxiety	9-item Beck Anxiety Inventory (BAI; Beck et al., 1988).	Self-report	3	yes
63	Campbell et al., (2021)	USA	Afghan, Iraq, Kuwait	137,897	group comparison	Peer-review	War Zone/non War zone	Army	95	Mean age: 23	combat exposure	Not applicable	PTSD, anxiety	PTSD or anxiety diagnoses were identified using electronic medical records from the Military Health System Data Repository	Administrative records	4	no
64	Campbell-Sills et al., (2018)	USA	Afghan	3,526	Longitudinal, prospective	Peer-review	not specified	Army	Not provided	Not specified	Problematic family life/functioning, difficult living and working conditions, Combat exposure	Not applicable	Mental ill-health	Composite International Diagnostic Interview Screening Scales (Kessler & Ustun, 2004).	Self-report	8	no

65	Caska et al., (2013)	USA	Iraq/Afghan/ other Middle East and non-Middle East locations	214	cross-sectional	Peer-review	not specified	Army, Air Force, National Guard, Reserve	97.2	Mean age: 35.08	Combat exposure, Witness/vicarious exposure	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	5	no
66	Cesur et al., (2013)	USA	not specif	15,669	Longitudinal, retrospective	Peer-review	Combat/war zone	Army	Not provided	Age range: 24–33	Combat exposure	Not applicable	PTSD, depression	“Has a doctor, nurse or other health care provider ever told you that you have or had post-traumatic stress disorder?”; Abridged Version of the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff(1977).	Self-report	6	no
67	Chambel et al., (2010)	Portugal	not specif	387	Longitudinal, prospective	Peer-review	Peacekeeping	Army	96.4	Mean age: 25.2	Violation of expectations	Not applicable	Burnout	Portuguese version (Marques Pinto, 2000) of the Maslach Burnout Inventory – General Survey (MBI-GS)	Self-report	8	yes
68	Choi et al., (2019)	USA	not specif	310	Longitudinal, prospective	Peer-review	Combat/war zone	Army	96	Mean age: 25.9	Combat exposure	Dispositional resource	Depression	Major Depressive Episode (MDE) scale of the WHO Composite International Diagnostic Interview-Screening Scales (CIDI-SC) (Kessler et al., 2013).	Self-report	8	no
69	Chui et al., (2020)	UK	Iraq	4,874	group comparison	Peer-review	Combat/war zone	Army, Navy, Air Force	92.6	Majority were 25+ (82.6%)	combat exposure	Not applicable	PTSD, psychological distress	PTSD Checklist–Civilian version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993); Psychological distress measured by 12-item General Helath Questionnaire (Goldberg & Williams, 1988)	Self-report	6	yes
70	Ciarleglio et al., (2018)	USA	Iraq	375	Longitudinal, prospective	Peer-review	Combat/war zone	Army	94.93	Mean age:35.12	Deployment-related trauma unspecified, Perceived threat, Problematic family life/functioning	Not applicable	PTSD, depression, anxiety	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al. 1991).	Clinical assessment	10	no
71	Cigrang et al., (2014)	USA	Iraq	144	Longitudinal, prospective	Peer-review	Combat/war zone	Air Force	89	Mean age: 26.8	Problematic family life/functioning	Communication with home front	Depression, performance	Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001). Duty performance scale (developed for study e.g., "distraction from focusing on the combat job or mission").	Self-report	6	no
72	Clarke et al., (2015)	Australia	Vietnam	60,228	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force	Not provided	Mean age: 25	Deployment characteristics	Not applicable	Mental health diagnosis	Department of Veterans' Affairs Disability Records.	Administrative records	4	no

73	Cobb et al., (2017)	USA	Iraq	161	Longitudinal, prospective	Peer-review	Combat/war zone	Army	80.12	Mean age: 24.41 (SD = 6.12)	Trait vulnerability, Combat exposure	Not applicable	PTSD, Depression, Anxiety	4-item Posttraumatic Stress Disorder Checklist - Short Version (PCL Short; Weathers, Litz, Herman, Huska, & Keane, 1993); 10-item Center for Epidemiological Studies Depression Scale (CES-D-10; Andresen, Malmgren, Carter, & Patrick, 1994); 19-item Combat Experience Log Anxiety Subscale	Self-report	9	no
74	Cornish et al., (2017)	USA	Iraq	192	Longitudinal, retrospective	Peer-review	Combat/war zone	Army	90.4	Mean age: 25	Combat exposure	Acceptance/emotion-focused, Religion/Spirituality	Psychological distress	Outcome Questionnaire– 45 (OQ-45; Lambert et al., 1996).	Self-report	10	yes
75	Craig (2007)	USA	not specif	29	cross-sectional	Thesis	Combat/war zone	Army	100	Mean age: 24.81	Combat exposure	Not applicable	Cognitive functioning	Wechsler Abbreviated Scale of Intelligence (Wechsler, 1999): Consists of four subtests (albeit with novel test stimuli) from the Wechsler Adult Intelligence Scale - 3rd edition (WAIS-III; Wechsler, 1997); California Verbal Learning Test: Adult Version (CVLT; Delis, Kramer, Kaplan, & Ober, 1987);	Researcher assessed	6	no
76	Creech et al., (2013)	USA	Persian Gulf	2,949	cross-sectional	Peer-review	Combat/war zone	Army, National Guard, Reserves	93.1	Mean age:31.6	Combat exposure, Avoidance coping	Problem-focused/Approach coping	PTSD	35 items from the Mississippi Scale for Combat-Related PTSD–ODS Version (M-PTSD; Keane, Cadell, & Taylor, 1988).	Self-report	9	yes
77	Crum-Cianflone et al., (2016)	USA	not specif	3,379	group comparison	Peer-review	not specified	Army, Navy, Air Force, Marines	63.10	Age range: 18-35+	Combat exposure	Not applicable	PTSD, depression, anxiety/panic	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1991); PRIME-MD Patient Health Questionnaire (PHQ; Spitzer et al. 1999).	Administrative records	9	no
78	Cunha et al., (2018)	USA	Afghan/Iraq/Bahrain/Djibouti/ Jordan/ Kyrgyzstan/ Kuwait/ Kazakhstan/ Qatar/ Turkey/ Libia/ Southwast asia/	276,494	cross-sectional	Peer-review	War Zone/non War zone	Marines	93	Mean age: 24.5	Not applicable	Not applicable	PTSD, Depression, Anxiety, other mental ill-health issue	Employee medical records.	Clinical assessment	4	no
79	Currie et al., (2011)	Canada	Afghan	490	cross-sectional	Peer-review	not specified	Army	95.71	Not specified	Not applicable	Not applicable	PTSD	The PTSD Checklist—Civilian Version (PCL–C; Weathers, Litz, Herman, Juska, & Keane, 1993).	Self-report	7	yes
80	Danker-Hopfe et al., (2018)	Germany	Afghan	121	Longitudinal, prospective	Peer-review	not specified	Army	100	Mean age: 26.1	Combat exposure	Not applicable	PTSD (sleep specific), Depression, Psychological distress	Addendum for PTSD of the Pittsburgh Sleep Quality Index (PSQI-A; Germain et al., 2005); Patient Health Questionnaire 9 (PHQ-9) of the Patient Health Questionnaire (PHQ-D, German version, Gräfe et al., 2004) which belongs to the Primary Care Evaluation of Mental Disorders	Self-report	10	yes

81	Davy et al., (2012)	Australia	Middle East	3,074	Longitudinal, prospective	Report (Govt/NGO)	Combat/war zone	Navy, Army, Air Force	91.87	Age range: 16-55+	Deployment characteristics, Combat exposure, Witness/vicarious exposure	Not applicable	Depression, PTSD, Anxiety, Psychological distress	Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001); Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); Kessler Psychological Distress Scale (K10; Kessler et al., 2002).	Self-report		12	no
82	De La Rosa, et al., (2015)	USA	Guantanamo	494	cross-sectional	Peer-review	Detention	Army, Navy, Air Force	80.57	Age range: 18-40+	Stress/Anxiety/tension/fear	Dispositional resource	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		7	no
83	Deitz (2014)	USA	Iraq/Afghan/other locations	195	cross-sectional	Thesis	not specified	Army, Navy, Air Force, Marines, National Guard, Coast Guard, Reserve	78.5	Not specified	Not applicable	Not applicable	PTSD, Trauma symptoms	Posttraumatic Stress Disorder Checklist-Military (PCL-M; Weathers, Huska, & Keane, 1991); Trauma Symptom Checklist (TSC; Briere, 1996).	Self-report		6	no
84	Delahaij et al., (2016)	Netherlands	not specif	164	Longitudinal, prospective	Peer-review	not specified	Military personnel (police training group and Air Task Force)	97.6	Mean age: 34.5	Perceived threat	Motivational	Burnout	4 items from Maslach Burnout Inventory General Survey (Schaufeli, Leiter, Maslach, & Jackson, 1996)	Self-report		7	yes
85	Dickstein (2013)	USA	Afghan	447	Longitudinal, retrospective	Thesis	Combat/war zone	Marines	100	Mean age: 23.8	Combat exposure	Team-based resources	PTSD, Depression, Anxiety	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993); Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996); Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988).	Self-report		9	no
86	Dickstein et al., (2010)	USA	Iraq	705	cross-sectional	Peer-review	Combat/war zone	Air Force (medical personnel)	48.4	Majority 25 - 29 years (19.3%)	Professional difficulties/demands , Combat exposure	Team-based resources	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 1991).	Self-report		7	yes
87	Dillon et al., (2018)	USA	Iraq/Afghan	3,238	cross-sectional	Peer-review	not specified	Military personnel	79.7	Not specified	Combat exposure	Not applicable	Depression, PTSD	The Beck Depression Inventory-II (BDI-II; Beck et al., 1996); The Davidson Trauma Scale (DTS; Davidson et al., 1997); Current and Lifetime PTSD and Major Depression assessed with the Structured Clinical Interview for DSM-IV-TR (SCID; First & Pincus, 2002)	Self-report		7	no
88	Dirkzwager et al., (2005)	Norway	Yugoslavia/Cambodia/Lebanon/other locations	3,481	cross-sectional	Peer-review	Peacekeeping	Military personnel, Army, Air Force, Navy (all separated from the military)	98	Mean age: 31	Combat exposure, Transgression moral stressor, Perceived threat	Job-design resources, Meaning/purpose	PTSD	Self-Rating Inventory for PTSD (SRIP; Hovens, Bramsen, & Van der Ploeg, 2000; Hovens et al., 1994).	Self-report		5	yes

89	Dobson et al., (2012)	Australia	Iraq/Afghanistan /Persian Gulf/other locations	14,032	cross-sectional	Report (Govt/NGO)	Combat/war zone	Army, Navy, Air Force Reserve	87.67	Age range: 18-45+	Combat exposure, Perceived threat, Witness/vicarious exposure, Transgression moral stressor, Deployment-related trauma unspecified, deployment characteristics	Civilian support (e.g., friends, family), Military support to family, Team-based resources	PTSD, Depression, Anxiety, Panic, Psychological distress	Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993); Patient Health Questionnaire–9 (PHQ-9; Kroenke et al., 2001); Kessler Psychological Distress Scale (K10; Kessler & Mroczek, 1994); Patient Health Questionnaire-15 (PHQ-15; Spitzer	Self-report		9	yes
90	Dolan et al., (2006)	USA	Kosovo	629	Longitudinal, prospective	Peer-review	Peacekeeping	Army	93	Mean age: 25.7	Concerns/worries	Dispositional resource	Depression	Center for Epidemiological Studies - Depression Scale (CES-D; Radloff, 1977; Santor & Coyne, 1997).	Self-report		9	yes
91	Dryden (2013)	USA	Iraq/Afghan/other locations	1,824	cross-sectional	Thesis	not specified	Military personnel	79.55	Not specified	Combat exposure	Not applicable	Depression, PTSD, positive psychological functioning	Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996); Davidson Trauma Scale (DTS; Davidson, 2004); Connor Davidson-Resiliency Scale (CD-RISC; Connor and Davidson, 2003).	Self-report		5	yes
92	DuPreez et al., (2012)	UK	Iraq	4,901	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, Reserve	100	Mean age: 32.4	Not applicable	Positive leadership perceptions, Team/colleague support, Team-based resources	PTSD, Psychological distress	17-item Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C; Weathers et al., 1993); 12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988).	Self-report		7	yes
93	Dutra et al., (2011)	USA	Iraq	54	cross-sectional	Peer-review	Combat/war zone	Army	0	Mean age: 27.5	Sexual harassment, Combat exposure	Not applicable	Depression, PTSD	20-items from Center for Epidemiological Studies - Depression Scale (CES-D; Radloff, 1977); 4-item Primary Care Posttraumatic Stress Disorder Screen (PC-PTSD; Prins et al., 2003)	Self-report		4	yes
94	Dyches et al., (2017)	USA	Afghan	592	cross-sectional	Peer-review	Combat/war zone	Army	100	Mostly between 18 - 24	Combat exposure, Anger/aggression	Team-based resources	Depression, PTSD	Patient Health Questionnaire 9-items (PHQ-9; Kroenke, Spitzer, & Williams, 2002); 17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		3	yes
95	Eisen et al., (2014)	USA	Iraq/Afghan/other locations	512	Longitudinal, retrospective	Peer-review	not specified	Army, Navy, Air Force, Marines, National Guard, Reserve	50	Mostly 35- 44 years (31.6%)	Not applicable	Dispositional resource	PTSD, Mental health functioning	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); Mental Component Score (MCS) of the 12-item Veterans RAND Health Survey (VR-12; Kazis et al., 2006; Ware et al., 1996).	Self-report		9	yes
96	Elrond et al., (2018)	Denmark	Afghan	243	Longitudinal, prospective	Peer-review	Combat/war zone	Army	Not provided	PTSD cohort mean age= 24.95, No PTSD cohort mean age = 29.19	Combat exposure	Organisational justice	PTSD	17-item Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C; Weathers et al., 1993).	Self-report and clinical assessment		11	yes

97	Engelhard et al., (2007)	Netherlands	Iraq	383	Longitudinal, prospective	Peer-review	not specified	Army	97	Mean age: 22.4	Other negative appraisals	Not applicable	PTSD	PTSD symptom scale (PSS; Foa, Riggs, Dancu, & Rothbaum, 1993); PTSD module of the SCID (First et al., 1997).	Self-report and clinical assessment	9	no
98	Engelhard et al., (2015)	Netherlands	Iraq	479	Longitudinal, prospective	Peer-review	Combat/war zone	Army	97	Mean age:22.5	Deployment-related trauma unspecified	Not applicable	PTSD	PTSD Symptom Scale (PSS; Foa, Riggs, Dancu, & Rothbaum, 1993; Dutch version: Engelhard, Arntz, & van den Hout, 2007).	Self-report	12	no
99	Erbes et al., (2012)	USA	Iraq	348	Longitudinal, prospective	Peer-review	Combat/war zone	National Guard	97	Mean age: 31.3	Combat exposure	Not applicable	PTSD symptom clusters	The Clinician Administered PTSD Scale (CAPS) (Blake et al., 1995); 17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report and clinical assessment	10	no
100	Farley (2003)	Canada	Bosnia	2,012	cross-sectional	Thesis	not specified	Army	91	Age range: 17-37+	Professional difficulties/demands , Deployment-related trauma unspecified, Problematic family life/functioning, difficult living and working conditions, Avoidance coping	Acceptance/emotion-focused, Job-design resources, Positive leadership perceptions, Problem-focused/Approach coping, Support-seeking, Team-based resources	Depression, Anxiety	Signs Scale (Dobreva-Martinova, 1998).	Self-report	5	yes
101	Ferrier-Auerbach et al., (2010)	USA	Iraq	2,677	cross-sectional	Peer-review	Combat/war zone	Army, National Guard,	92	Mean age: 29.9	Combat exposure, Violation of expectations	Communication with home front, Meaning/purpose, Team/colleague support	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	8	no
102	Finkelstein-Fox et al., (2021)	USA	Iraq, Turkey, Qatar, Afghanistan, others, or surrounding waters	850	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines	59.6	Mean age: 35.2, age range = 22.0–67.4	combat exposure, general harassment, sexual harassment	meaning/purpose	PTSD, depression	Patient Health Questionnaire (PHQ-8; Kroenke et al., 2009); 17-item Posttraumatic Stress Disorder Checklist for DSM-IV (PCL-C; Weathers et al., 1993)	Self-report	7	yes
103	Fontana et al., (2000)	USA	Somalia	1,504	group comparison	Peer-review	Peacekeeping	Military personnel	86.90	Mean age: 26.35	Combat exposure, Perceived threat, Witness/vicarious exposure, Interpersonal deployment trauma, difficult living and working conditions, Stress/Anxiety/tension/fear	Not applicable	PTSD	Modified versions of the Posttraumatic Stress Disorder Checklist (Weathers et al., 1993) and the Mississippi Scale (Keane et al., 1988).	Self-report	5	no
104	Foran et al., (2013)	USA	Iraq	194	cross-sectional	Peer-review	Combat/war zone	Army	98.4	Age range: 18-40+	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist (PCL; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996); 9-item Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, Williams, & the Patient Heath Questionnaire Primary Care Study Group, 1999)	Self-report	8	no

105	Garber et al., (2012)	Canada	Afghan	2,779	cross-sectional	Peer-review	Combat/war zone	Military personnel	Not provided	Not specified	Combat exposure, Problematic family life/functioning	Not applicable	Mental ill-health problem (i.e., meeting cut-off for anxiety, depression or PTSD).	Patient Health Questionnaire (PHQ; Spitzer, et al., 1999); PTSD Checklist – Civilian (PCL; Blanchard et al., 1996).	Self-report		5	yes
106	Gehrman et al., (2013)	USA	not specif	9,043	Longitudinal, prospective	Peer-review	not specified	Army, Navy, Air Force, Marines, Coast Guard, Reserves	83.1	Mean age: 33.1 (SD=8.3)	Combat exposure	Not applicable	PTSD, anxiety	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993; Blanchard et al., 1996); 7-item Anxiety Module of the Patient Health Questionnaire (PHQ; Spitzer et al., 1999).	Self-report		10	no
107	George et al., (2020)	USA	Afghan, Iraq	302	cross-sectional	Peer-review	not specified	not specified	88.7	Mean age: 30.54 (SD=4.48)	combat exposure	Not applicable	PTSD, depression	Beck Depression Inventory-II (BDI-II; Beck et al., 1996) ; Clinician Administered PTSD Scale for DSM-IV (CAPS; Blake et al., 1995)	Self-report		8	no
108	Gjerstad et. al., (2020)	Norway	Lebanon	10,605	cross-sectional	Peer-review	Peacekeeping	UN forces	97.1	Majority 50–59 years (47.4%)	Deployment related trauma, Problematic family life/functioning	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist–Military Version (PCL-M; (Weathers et al., 1993)	Self-report		8	yes
109	Goldmann et al., (2012)	USA	Iraq/Afghan/others	1,668	cross-sectional	Peer-review	not specified	Army (National Guard)	89.8	Age range: 17-45+	Not applicable	Team/colleague support	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		8	yes
110	Gorman et al., (2021)	USA	Afghan, Iraq	699	cross-sectional	Peer-review	Combat/war zone	Army, Marines	0	Mean age: 36.9	Combat exposure, interpersonal deployment trauma, general harassment	Not applicable	PTSD, depression	17-item PTSD Checklist (Weathers et al., 1993); Structured Clinical Interview for DSM–IV (SCID-IV; Spitzer et al., 1999); 9-item depression subscale of the Patient Health Questionnaire (Spitzer et al., 1999).	Self-report, clinician assessed		6	yes
111	Gradus et al., (2013)	USA	not specif	2,321	group comparison	Peer-review	Combat/war zone	Military personnel (separated from service)	48.51	Female mean age: 34, Male mean age: 37	Combat exposure, Witness/vicarious exposure, Sexual harassment, General harassment	Not applicable	PTSD, depression	17-item Posttraumatic Stress Disorder Sympom Checklist - Military (PCL-M; Weathers et al., 1993); 10-item Boston version of the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977).	Self-report		7	no
112	Granado et al., (2012)	USA	Iraq/Afghan	1,867	cross-sectional	Peer-review	not specified	Navy	76.5	Not specified	Deployment characteristics, Combat exposure, Concerns/worries	Not applicable	PTSD, Mental ill-health symptoms (e.g., depression, panic).	Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C; Weathers et al., 1993); Primary Care Evaluation of Mental Disorders (PRIME MD) Patient Health Questionnaire (Spitzer et al., 1999).	Self-report		8	yes

113	Gray et al., (2004)	USA	Somalia	1,040	longitudinal, retrospective	Peer-review	Peacekeeping	Military personnel	Not provided	Mean age: 26.73	Other negative appraisals, Combat exposure, Frustration	Positive deployment experiences	PTSD	The PTSD Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993); Mississippi Scale for Combat-Related PTSD (Keane, Caddell, & Taylor, 1988).	Self-report	6	yes
114	Green et al., (2010)	USA	Iraq	497	cross-sectional	Peer-review	Combat/war zone	Separated from military	83	Mean age: 36.57	Combat exposure	Dispositional resource	PTSD	17 items from the Davidson Trauma Scale (McDonald et al., 2009).	Self-report and clinical assessment	5	yes
115	Green et al., (2016)	USA	Iraq	738	cross-sectional	Peer-review	Combat/war zone	Military personnel	49.1	Mean age: 37.7	Combat exposure, Witness/vicarious exposure, deployment characteristics	Not applicable	PTSD	The Structured Clinical Interview for DSM–IV (SCID-IV) PTSD module (First, Spitzer, Williams, & Gibbon, 2000).	Clinical assessment	7	yes
116	Griffith (2012)	USA	Iraq/Afghan	4,546	cross-sectional	Peer-review	Combat/war zone	National Guard	Not provided	Not specified	Combat exposure	Not applicable	PTSD	2-items soldiers were asked about their postdeployment PTSD symptoms including: upsetting memories or dreams about past events, and trouble falling and staying asleep. Items aimed to assess the symptoms of PTSD, which occur as three symptom clusters (American Psychiatric Association, 2000).	Self-report	3	no
117	Groer et al., (2015)	USA	Iraq/Afghan	52	cross-sectional	Peer-review	Combat/war zone	Army, Air Force, National Guard, Reserves	98	Mean age: 25	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); 20-items from Center for Epidemiological Studies - Depression Scale (CES-D; Andresen, Malmgren, Carter, & Patrick, 1994).	Self-report	8	yes
118	Gross et al., (2018)	USA	Iraq/Afghan	330	cross-sectional	Peer-review	Combat/war zone	Military personnel	0	Not specified	Combat exposure, Interpersonal deployment trauma	Not applicable	PTSD	17 items from the Davidson Trauma Scale (McDonald et al., 2009).	Self-report and clinical assessment	6	yes
119	Gross et al., (2019)	USA	not specif	810	cross-sectional	Peer-review	not specified	Military personnel	58.4	Mostly 30–39 years (36.5%)	Combat exposure, Interpersonal deployment trauma	Not applicable	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Wilkins et al., 2011); Modified version of the Patient Health Questionnaire Depression Scale-8 (PHQ-8; Kroenke and Spitzer, 2002).	Self-report	8	yes
120	Grubbs (2012)	USA	not specif	337	cross-sectional	Thesis	not specified	Air Force	91.4	Not specified	Combat exposure, deployment characteristics	Not applicable	PTSD	Primary Care PTSD Screen (PC-PTSD; Prins et al., 2003).	Self-report	7	no

121	Gunia et al., (2015)	USA	Africa/Afghan	505	cross-sectional	Peer-review	Peacekeeping	Military personnel	89.9	Not specified	Not applicable	Positive leadership perceptions, adequate sleep, Supervisor / leadership support, Team-based resources	Depression	9 items from the Patient Health Questionnaire for Depression (PHQ-9; Spitzer, Kroenke, & Williams, 1999)	Self-report	4	no
122	Hahn et al., (2015)	USA	Iraq/Afghan	90	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines	65	Mean age: 28.9	Combat exposure, Interpersonal deployment trauma	Not applicable	PTSD	17-item National Center for PTSD Checklist of the Department of Veteran Affairs (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	7	yes
123	Han et al., (2014)	USA	Iraq	1,008	Longitudinal, prospective	Peer-review	Combat/war zone	Army, National Guard	100	Mean age:25.8	Combat exposure	Team/colleague support	PTSD	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993).	Self-report	10	yes
124	Hanwella et al., (2012)	Sri Lanka	not specif	673	cross-sectional	Peer-review	Combat/war zone	Navy, Navy Special Forces	Not provided	Special forces: mostly <25 years (39.4%) and mean age 26.63 years; regular: mostly 25-29 years (39.6%) and mean age 28.26 years.	Deployment-related trauma unspecified	Not applicable	Psychological distress, PTSD	12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988); 17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 2013).	Self-report	9	no
125	Hanwella et al., (2014)	Sri Lanka	not specif	495	cross-sectional	Peer-review	Combat/war zone	Navy, Navy Special Forces	Not provided	Mean age: 30	Combat exposure	Not applicable	PTSD, Psychological distress	17-item National Centre for PTSD checklist civilian version (PCL-C; Weathers et al., 1993); 12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988).	Self-report	6	no
126	Hellenthal et al., (2017)	Germany	Afghan	191	cross-sectional	Peer-review	Combat/war zone	Military personnel	92	Mean age: 29.01	Combat exposure, Transgression moral stressor, Witnessed moral stressor	Not applicable	PTSD, depression	The German translation of the Posttraumatic Stress Diagnostic Scale (PDS; Ehlers et al., 1996); The German version of the Patient Health Questionnaire (PHQ-D; Löwe et al., 2002).	Self-report	7	no
127	Henschel et al., (2016)	USA	not specif	66	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard	81.8	Mean age: 35.59	Witness/vicarious exposure, Combat exposure	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist-5 (PCL-5; Weathers et al., 2013); Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995).	Self-report and clinical assessment	5	yes
128	Heron et al., (2013)	USA	Iraq	168	Longitudinal, prospective	Peer-review	Combat/war zone	Air Force	88.1	Mean age: 26.27	Difficult living and working conditions, Combat exposure	Not applicable	PTSD, depression	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 1993); 9-item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001).	Self-report	9	no

129	Herrera, et al., (2015)	USA	Iraq/Afghan	163	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard, Reserve	87	Mean age: 33	Combat exposure	Dispositional resource	PTSD	17-items from Posttraumatic Stress Disorder Checklist -Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	5	no
130	Hotopf et al., (2003)	UK	Persian Gulf	2,049	cross-sectional	Peer-review	Peacekeeping	Army	89.4	Mostly 30-34 years (23%)	Combat exposure, deployment characteristics	Not applicable	Psychological distress	12-item General Health Questionnaire (Goldberg, 1972).	Self-report	8	no
131	Hotopf et al., (2006)	UK	Iraq	4,722	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force Reserve	92	Not specified	Combat exposure	Not applicable	PTSD, psychological distress	17-item Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C; Weathers et al., 1993); 12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988).	Self-report	11	no
132	Hourani et al., (2012)	USA	not specif	24,690	cross-sectional	Peer-review	not specified	Army, Navy, Marine Corps, Air Force, Coast Guard	Not provided	Age range: 17-35+	Combat exposure	Not applicable	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C; Weathers et al., 1994); 10- item short version of the Cente for Epidemiologic Studies Depression Scale (CESD-10; Andresen et al., 1994).	Self-report	7	yes
133	Huang (2010)	USA	Iraq/Afghan	289	cross-sectional	Thesis	Combat/war zone	Army, Navy, Air Force, Marines, National Guard	84.4	Mean age: 30.2	Combat exposure, Transgression moral stressor, Guilt/shame, Perceived threat	Not applicable	PTSD, positive psychological functioning	17-item Posttraumatic Stress Disorder Checklist - Military (PCL-M; Weathers et al., 1993); Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985).	Self-report	6	yes
134	Huang et al., (2015)	USA	Iraq/Afghan	289	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard	84.4	Mean age:30.2	Combat exposure, Perceived threat, Guilt/shame, Transgression moral stressor	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	7	yes
135	Hughes et al., (2018)	USA	not specif	1,118	cross-sectional	Peer-review	Combat/war zone	Military personnel	80.1	Mean age:38	Combat exposure	Dispositional resource, adequate sleep	Psychological distress	Global Severity Index (GSI) of the Symptom Checklist 90 -Revised (SCL; Derogatis & Savitz, 1999).	Self-report	6	yes
136	Interian et al., (2014)	USA	Iraq/Afghan	196	Longitudinal, prospective	Peer-review	Combat/war zone	National Guard	86.2	Mostly between 26-39	Combat exposure, Problematic family life/functioning	Job-design resources, Team-based resources	PTSD	17-items from Posttraumatic Stress Disorder Checklist -Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	10	yes

137	Ippolito et al., (2005)	USA (stationed in Germany)	Kosovo	638	Longitudinal, prospective	Peer-review	Peacekeeping	Army	97	Mean age: 25.53	Difficult living and working conditions, Avoidance coping	Acceptance/emotion-focused, Job-design resources, Various coping strategies/ stress recovery activities	Psychological distress	12-item General Health Questionnaire (GHQ; Goldberg, 1972).	Self-report	10	yes
138	Ismail et al., (2000)	UK	Gulf	3,297	cross-sectional	Peer-review	not specified	Navy, Marines, Army, Air Force	Not provided	Age range:<20-40+	Not applicable	Job-design resources	Psychological distress, PTSD	12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988); Hopkins Symptom Checklist (HSCL; Derogatis et al., 1974).	Self-report	6	no
139	Israel-Cohen et al., (2016)	Israel	Israel-Gaza	54	cross-sectional	Peer-review	Combat/war zone	Army	100	Mean age: 27	Combat exposure	Dispositional resource, Religion/Spirituality	PTSD	20 item Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers et al., 2013).	Self-report	6	yes
140	Iversen et al., (2008)	UK	Iraq	4,762	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines	92.2	Mostly 25–29 years (23.7%)	Combat exposure, Other interpersonal demands, Witness/vicarious exposure	Job-design resources	PTSD	7-item National Center for Posttraumatic Stress Disorder Checklist (PCL; Blanchard et al. 1996).	Self-report	7	yes
141	James et al., (2013)	USA	Iraq/Afghan	271	Longitudinal, retrospective	Peer-review	not specified	Army, Navy, Air Force, Marines, National Guard, Reserve	85	Mean age: 31.03	Combat exposure, Perceived threat	Not applicable	PTSD, depression	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1991); Beck Depression Inventory-Short Form (BDI-SF; Beck & Beck, 1972).	Self-report	7	yes
142	Jones et al., (2012)	UK	Afghan	1,430	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Reserve	91.7	Not specified	Not applicable	Positive leadership perceptions, Team-based resources	Psychological distress	12-item General Health Questionnaire (GHQ-12) (Goldberg et al., 1997)	Self-report	6	yes
143	Jordan et al., (2017)	USA	Afghan	867	Longitudinal, retrospective	Peer-review	Combat/war zone	Marines	Not provided	Not specified	Combat exposure	Not applicable	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	7	no
144	Josephs et al., (2017)	USA	Iraq	120	Longitudinal, prospective	Peer-review	Combat/war zone	Army	86.67	Not specified	Physiological biomarkers, Combat exposure	Not applicable	PTSD	The Posttraumatic Stress Disorder Checklist (PCL-Short) Bliese et al., 2008)	Self-report	13	yes

145	Kanesarajah et al., (2016)	Australia	Iraq/Afghan	11,411	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Reserve	88.28	Age range: 18-40+	Not applicable	Team-based resources	PTSD, psychological distress	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993); 10-item Kessler 10 (K10; Kessler & Mroczek, 1994).	Self-report	8	no
146	Kang et al., (2005)	USA	Gulf	11,441	group comparison	Peer-review	Combat/war zone	Military personnel	81.37	Females (PTSD) mean age=39.1, Females (no PTSD) mean age=38.1, Males (PTSD) mean age=40.4, Males (no PTSD) mean age=39.6	Sexual harassment, Combat exposure, Interpersonal deployment trauma	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist (PCL; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996).	Self-report	7	no
147	Karstoft et al., (2020)	Denmark	Afghan	347	Longitudinal, retrospective	Peer-review	Combat/war zone	Army	94	Mean age: 31.3	combat exposure, witnessed/ vicarious exposure	Not applicable	PTSD, depression	17-item Posttraumatic Stress Disorder Checklist for DSM-IV (PCL-C; Weathers et al., 1993); Assessment of depression in veterans scale (Karstoft et al., 2017)	Self-report	9	no
148	Kearns et al., (2016)	USA	Iraq/Afghan	673	cross-sectional	Peer-review	Combat/war zone	Army, Marine Corps	0	Mean age: 36.9	Combat exposure, Witness/vicarious exposure	Not applicable	PTSD, Depression	PTSD module of the Structured Clinical Interview for DSM–5 (SCID-5; First, Williams, Karg, & Spitzer, 2015); MDD module of the SCID-5 (First et al., 2015).	Clinical assessment	7	yes
149	Keller et al., (2005)	USA	Iraq/Afghan	2,771	cross-sectional	Thesis	Combat/war zone	Army	97.2	Age range: 20-24	Combat exposure	General social support, Positive leadership perceptions, Team-based resources	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993).	Self-report	3	yes
150	Kelley et al., (2019)	USA	Iraq/Afghan	283	cross-sectional	Peer-review	Combat/war zone	Army, Navy	60.31	Mean age:32.61	Combat exposure	Not applicable	Depression, Anxiety, PTSD	10-item Short Form of the Center for Epidemiologic Studies Depression Scale (CES-D; Kohout, Berkman, Evans, & Cornoni-Huntley, 1993); 14-item Kremen Anxiety Scale (KAS; Kremen, 1996); 20-item Posttraumatic Stress Disorder Checklist for DSM–5 (PCL-5; Blevins, Weathers, Davis,	Self-report	8	yes
151	King et al., (1999)	USA	Vietnam	1,632	cross-sectional	Peer-review	Combat/war zone	Military personnel	73.53	Not specified	Witnessed moral stressor, Perceived threat, difficult living and working conditions	Not applicable	PTSD	Mississippi Scale Items (MSI, Keane et al., 1988); Diagnostic Interview Schedule (Robins, Helzer, Croughan, & Ratcliff, 1981); Predicted Probability of PTSD (Kulka et al., 1990).	Self-report	4	yes
152	King et al., (2000)	USA	Gulf	2,942	longitudinal, retrospective	Peer-review	Combat/war zone	Army, National Guard, Reserves	92	males mean age: 30.39, females mean age: 28.10	Combat exposure	Not applicable	PTSD	Mississippi Scale for Combat-Related PTSD (Keane et al., 1988).	Self-report	9	no

153	King et al., (2008)	USA	Persian Gulf	357	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, Coast Guard, Reserves	76	Age range: 20-60+	Perceived threat, Combat exposure, Witness/vicarious exposure, Physical demands	Not applicable	PTSD, Depression, Anxiety, Mental health functioning	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 2013); Adaptive version of the 7-item Beck Depression Inventory - Primary Care (BDI; Beck, 1997); 12-Item Short Form Health Survey (SF-12; Ware et al., 1996).	Self-report	9	yes
154	Kintzle et al., (2015)	USA	not specif	126	cross-sectional	Peer-review	not specified	Army (National Guard)	88	Mean age: 33.15	Combat exposure	Not applicable	Depression, anxiety, PTSD	Patient Health Questionaire-9 (PHQ-9; Kroenke et al., 2001); Generalized Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006);17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 1993).	Self-report	8	no
155	Kline et al., (2011)	USA	Iraq	1,665	cross-sectional	Peer-review	not specified	National Guard	89.5	Mean age: 31.3	Combat exposure	Not applicable	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist -Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993); 8-item Patient Health Questionnaire (PHQ-8; Kroenke et al., 2009).	Self-report	7	no
156	Kline et al., (2013)	USA	Iraq	922	Longitudinal, prospective	Peer-review	not specified	National Guard	90.1	Mean age: 31	Combat exposure	Team-based resources	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996).	Self-report	10	yes
157	Koffel et al., (2016)	USA	Iraq	522	Longitudinal, prospective	Peer-review	Combat/war zone	Army (National Guard)	Not provided	Mean age: 32	Combat exposure	Not applicable	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993); Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996).	Self-report	10	no
158	Kok et al., (2020)	USA	Afghan, Iraq	785	cross-sectional	Peer-review	Combat/war zone	Army	90.2	Age range: 30–39 (32.9%)	combat exposure	Team based resources	PTSD	20 item PCL-5 (Weathers et al., 2013)	Self-report	6	no
159	Kolkow et al., (2007)	USA	not specif	102	cross-sectional	Peer-review	not specified	Military health care personnel	66.3	Mean age: 34.3	Combat exposure, Perceived threat	Not applicable	PTSD	17-item Posttraumatic Stressor Disorder Checklist of the Department of Veterans Affairs (Blanchard et al., 1996).	Self-report	4	yes
160	Komnick (2021)	USA	Afghan, Iraq	97	cross-sectional	Thesis	not specified	Army, Navy, Air Force, Marines	71	Age range: <25 to 60 years old. Majority of the participants (33%) were in the 31 to 35 age	combat exposure	Not applicable	PTSD, depression	20 item PCL-5 (Weathers et al., 2013); depression measured with 9-item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001)	Self-report	5	yes

161	Krasikova et al., (2015)	USA	not specif	1,889	Longitudinal, prospective	Peer-review	War Zone/non War zone	Army	90.4	Mean age:25.5	Combat exposure	Not applicable	Mental ill-health diagnosis	If they were diagnosed by a medical professional with PTSD, anxiety, or depression within 120 days on return from deployment.	Clinical assessment	8	yes
162	Krauss et al., (2019)	USA	Iraq/Afghan	191	Longitudinal cohort	Peer-review	Combat/war zone	Combat medics	73	Mean age: 30.18	Combat exposure	Dispositional resource	PTSD, Depression	Posttraumatic Stress Disorder Checklist—Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); The nine-item Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	12	yes
163	Krauss et. al. (2021)	USA	Afghan, Iraq	402	Longitudinal, retrospective	Peer-review	not specified	Army	92.87	Majority were 18–24 years old (43.8%)	combat exposure, moral challenge unspecified	Not applicable	PTSD, depression, anxiety	17- item PTSD Checklist (PCL; Weathers et al., 1993); depression measured with 9-item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) ; 7-item Generalized Anxiety Disorder scale (Spitzer et al., 2006)	Self-report	8	yes
164	La Rocca, et al., (2020)	USA	Iraq, Afghan, Kuwait, Bosnia, Saudi Arabia, Vietnam, Korea, WWII Pacific, other	130	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, coast guard	90.8	Mean age: 45.28 (SD=16.79)	combat exposure	Not applicable	PTSD, depression	Depression measured by 9-item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001),PTSD Checklist 5 (PCL-5; Weathers et al., 2013)	Self-report	8	no
165	Lancaster et al., (2016)	USA	Iraq	150	cross-sectional	Peer-review	Combat/war zone	Army	88	Mean age: 25.33	Difficult living and working conditions, Perceived threat, deployment characteristics	Not applicable	PTSD, Depression	4 items from Posttraumatic Stress Disorder Checklist (Bliese et al., 2008; Weathers, Litz, Herman, Huska, & Keane, 1993); 10 items from the Center for Epidemiological Studies Depression Scale (Andresen, Malmgren, Carter, & Patrick, 1994).	Self-report	7	yes
166	LaRocca et al., (2018)	USA	Iraq/ Afghan/Kuwait, Vietnam/ Korea/ Pacific/ Bosnia/ Saudi Arabia/ other locations	130	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, Coast Guard	90.8	Mean age: 45.28	Combat exposure	Positive leadership perceptions	PTSD, Depression	Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers et al., 2013); Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	7	yes
167	Laws et al., (2016)	USA	Iraq/Afghan	818	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines (All separated from military)	60	Mean age: 35.1	Combat exposure, Interpersonal deployment trauma	Team-based resources	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	7	yes
168	Lee et al., (2013)	Canada	Afghan	1,584	Longitudinal, prospective	Peer-review	Combat/war zone	Army, Navy, Air Force	100	Mean age: 26.2	Combat exposure	Not applicable	Mental health functioning	Mental Health Component Summary (MCS) derived from the SF-36 (Ware & Sherborne, 1992).	Self-report	10	no

169	Lee et al., (2015)	Canada	Afghan/other	3,319	Longitudinal, prospective	Peer-review	not specified	Army, Navy, Air Force	90	Age range: <25-40+	Combat exposure	Not applicable	PTSD, depression	2-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Ruggiero et al., 2003); 2-item Patient Health Questionnaire (PHQ-2; Kroenke et al., 2001).	Self-report		10	no
170	Lee et al., (2020)	South Korea	Vietnam	367	cross-sectional	Peer-review	not specified	Army	100	Mean age: 72 years	Combat exposure, difficult living and working conditions, perceived threat, moral challenge unspecified	Not applicable	PTSD, anxiety, depression	20 item PCL-5 (Weathers et al., 2013); Depressive symptoms (six items) and anxiety symptoms (six items) were assessed by the Brief Symptom Inventory, a short form of the Symptom Checklist 90-R (Derogatis & Spencer, 1993)	Self-report		8	yes
171	Levin-Rector et al., (2018)	USA	not specif	1,105,452	Longitudinal, prospective	Peer-review	not specified	Army, Marines	89.6	Mean age:20.85	Combat exposure	Not applicable	PTSD, Anxiety, Depression, other mental ill-health diagnosis	Clinical interview resulting in a diagnosis based on the International Classification of Diseases 9th revision diagnostic code for PTSD, Anxiety, Depression, and any other Mental Health Disorder	Clinical assessment		6	no
172	Levy et al., (2011)	USA	not specif	183	cross-sectional	Peer-review	not specified	Air Force (Chaplins)	92.3	Age range: <40 - 50+ years. Most between 41-50 years (42.1%)	living and working conditions, Professional difficulties/demands	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		7	no
173	Lewis (2004)	USA	Kosovo	546	Longitudinal, retrospective	Thesis	Peacekeeping	Army	92.5	Mean age:25.7	Professional difficulties/demands , Concerns/worries	Job-design resources	Psychological distress	12-item General Health Questionnaire (GHQ; Goldberg & Hillier, 1979).	Self-report		9	yes
174	Litz et al., (1997)	USA	Somalia	3,461	cross-sectional	Peer-review	Peacekeeping	Military personnel	89	Mean age: 26	Combat exposure, Frustration	Positive deployment experiences	PTSD	52-items from the the Posttraumatic Stress Disorder Checklist (Weather et al., 1993) and the Mississippi Scale for Combat-Related Post-traumatic Stress Disorder (Keane et al., 1988)	Self-report		8	yes
175	Liu et al., (2016)	China	Xinjiang, China	303	cross-sectional	Peer-review	Combat/war zone	Military personnel	85.1	Mostly 32+ (74.3%)	Combat exposure	Dispositional resource	PTSD	17-item Posttraumatic Stress Disorder Checklist -Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		5	no
176	Loew et al., (2014)	USA	Iraq/Afghan	272	cross-sectional	Peer-review	not specified	Army	100	Mean age:29.33	Combat exposure	Meaning/purpose	PTSD	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993).	Self-report		9	yes

177	Lommen et al., (2014)	Netherlands	Afghan	249	Longitudinal, prospective	Peer-review	not specified	Army	98.4	Mean age: 23.82	Deployment-related trauma unspecified, Trait vulnerability	Not applicable	PTSD	Dutch version (Engelhard, Arntz, & van den Hout, 2007) of the Posttraumatic Symptom Scale-Self Report (PSS; Foa, Riggs, Dancu, & Rothbaum, 1993).	Self-report	12	yes
178	Luxton et al., (2010)	USA	Iraq/Afghan	6,943	Longitudinal, prospective	Peer-review	not specified	Army	92.57	Mean age:27.37	Combat exposure	Not applicable	PTSD, Depression	4-item Primary Care PTSD Screen (PC-PTSD; Prins et al., 2003); 9-item Patient Health Questionnaire (Kroenke et al., 2001).	Self-report	9	no
179	MacDonald et al., (1999)	New Zealand	Cambodia/ Somalia /Sinai/ former Yugoslavia/ Iraq/ Angola/ Middle East	277	Longitudinal, prospective	Peer-review	Peacekeeping	Army, Navy, Air Force	93	Mean age: 31	Deployment-related trauma unspecified, difficult living and working conditions	Not applicable	Psychological distress, PTSD, depression, anxiety, positive psychological functioning	Mental Health Inventory - Factor 1 Psychological Distress (Veit & Ware, 1983); 35-item Mississippi Scale (Keane, Caddell, & Taylor, 1988); Beck Depression Inventory (BDI; Beck& Steer, 1987); State Anxiety Section of the State Trait Anxiety Scale (Spielberger, 1968); Mental Health Inventory - Factor 2	Self-report	9	yes
180	MacEra et al., (2014)	USA	Afghanistan/Kuwait/Iraq	31,534	Longitudinal, retrospective	Peer-review	Combat/war zone	Navy, Marines, Reserve	93.99	Mostly <25 years (52.2%)	Witness/vicarious exposure, Perceived threat, Combat exposure, deployment characteristics	Not applicable	PTSD	Primary Care PTSD screen (PC-PTSD; Bliese et al., 2008).	Self-report	8	no
181	MacGregor et al., (2014)	USA	Afghan/Kuwait/Iraq	3,512	cross-sectional	Peer-review	Combat/war zone	Marines	100	Age range: 18-25+	Combat exposure	Not applicable	PTSD, depression	4-item PTSD Screen of the Post-Deployment Health Assessment (Bliese et al., 2008); Patient Health Questionnaire 2 (PHQ-2; Kroenke et al., 2003).	Self-report	9	no
182	MacGregor et al., (2017)	USA	Iraq/Afghan/Kuwait	4,275	cross-sectional	Peer-review	not specified	Navy (Healthcare Specialists)	84	Age range: 18-25+	Deployment characteristics, Combat exposure	Not applicable	PTSD	4 items from the Primary Care PTSD Screen (PC-PTSD; Prins et al., 2004).	Self-report	6	no
183	Maguen et al., (2004)	USA	Kosovo	203	Longitudinal, prospective	Peer-review	Peacekeeping	Army	93	Mean age: 28.3	Difficult living and working conditions, Frustration, Combat exposure	Positive deployment experiences, Team-based resources	PTSD, Depression	Modified version of the Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); 6-item Brief Symptom Inventory (BSI; Derogatis & Spencer, 1983).	Self-report	7	yes
184	Marx et al., (2009)	USA	Iraq	285	Longitudinal, prospective	Peer-review	Combat/war zone	Army	93.3	Mean age:24.47	Combat exposure	Not applicable	Cognitive functioning	Weschler Memory Scale - Third Edition (WMS-III; Weschler, 1997; Weschler, 1945); Automated Neuropsychological Assessment Metrics (ANMS; Reeves, Kane, Elsmore, Winter, & Bieberg, 2002); Neurobehavioural Evaluation System - Continuous Performance Task (CPT, Letz, 2000).	Researcher assessed	9	no

185	McAndrew et al., (2013)	USA	Iraq/Afghan	790	Longitudinal, prospective	Peer-review	Combat/war zone	Army, National Guard	89.7	Mean age: 28	Combat exposure, difficult living and working conditions	Team-based resources	Mental health functioning	Veteran's Rand-36 (VR-36; Kazis, 2000).	Self-report	11	yes
186	McCallum et al., (2015)	USA	Iraq/Afghan	528	Longitudinal, prospective	Peer-review	Combat/war zone	National Guard	89	Mean age: 29.97	Combat exposure, Witness/vicarious exposure, Perceived threat, Sexual harassment	Not applicable	PTSD, Depression	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993). 21 items from the Beck Depression Inventory - II (BDI-II; Beck, Steer, & Brown, 1996).	Self-report	10	yes
187	McCuaig-Edge et al., (2020)	Canada	Afghan	2,927	Longitudinal, prospective	Peer-review	not specified	Army, Navy, Air Force	90.4	Mean age: 27.0 (SD = 5.3)	combat exposure	Not applicable	PTSD, depression	PTSD Checklist–Civilian version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993); Depression measured with Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, & Williams, 1999);	Self-report	8	no
188	McKenzie et al., (2004)	Australia	Kwait/Iraq	1,374	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force	100	Mean age: 38.1	Deployment-related trauma unspecified	Not applicable	Psychological distress, PTSD	12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988); 17-item Posttraumatic Stress Disorder Checklist – Specific (PCL-S; Weathers et al., 1993).	Self-report	6	no
189	McLean et al., (2013)	USA	Iraq	253	cross-sectional	Peer-review	Combat/war zone	Air Force (medical personnel)	40.7	Age range: 18 - 45	Combat exposure, Professional difficulties/demands	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993)	Self-report	6	yes
190	McNally et al., (2011)	USA	Iraq	122	Longitudinal, prospective	Peer-review	Combat/war zone	Air Force (medical personnel)	50	Mean age:25.7	Combat exposure, Professional difficulties/demands , Trait vulnerability	Dispositional resource	PTSD	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathe, Litz, Herman, Huska, & Keane, 1993).	Self-report	9	no
191	Medina (2010)	USA	Iraq/Afghan	31	cross-sectional	Thesis	Combat/war zone	Military personnel	100	Mean age: 33	Combat exposure	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist - Military version (PCL-M; Weathers et al., 1993).	Self-report	3	yes
192	Michaud et al., (2021)	Canada	Afghan	318	cross-sectional	Peer-review	Combat/war zone	Army	Not provided	Mostly <38 years (88.1%); Age range: 18 - 47 years	combat exposure, witnessed/ vicarious exposure, morale challenge unspecified	Not applicable	Psychological distress	10-item Kessler Psychological Distress Scale (K10; Kessler et al., 2002)	Self-report	6	no

193	Minassian et al., (2015)	USA	Iraq	2,160	Longitudinal, prospective	Peer-review	Combat/war zone	Marines	Not provided	Phase 1 mean age= 22.4, Phase 2 mean age= 21.9	Difficult living and working conditions	Not applicable	PTSD	Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995).	Clinical assessment	11	no
194	Mott et al., (2012)	USA	Iraq/Afghan	1,740	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines	89	Mean age: 29.43	Combat exposure, Perceived threat	Team/colleague support	PTSD, Anxiety, other mental ill-health diagnosis	Postdeployment Axis I diagnoses of PTSD, Anxiety, and Other Mental Ill-health were obtained through review of veterans' electronic medical records.	Administrative records	5	yes
195	Mulligan et al., (2010)	UK	Iraq	611	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force	89	Mean age: 26 years	Problematic family life/functioning	Not applicable	Psychological distress	12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988).	Self-report	7	yes
196	Mulligan et al., (2012)	UK	Iraq/Afghan	2,042	cross-sectional	Peer-review	not specified	Army, Navy, Air Force, Reserve	89.91	Age range: 118-35+	Problematic family life/functioning, Combat exposure	Communication with home front, Military support to family, Positive leadership perceptions, Team-based resources	PTSD, psychological distress	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1994), 12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1998).	Self-report	5	yes
197	Myers (2016)	USA	Afghan	200	cross-sectional	Thesis	Combat/war zone	Army	90	Age range: 18-40+	Not applicable	Communication with home front	Positive psychological functioning	84-item Ryff Scales of Psychological Wellbeing (Ryff, 1995).	Self-report	5	yes
198	Nassif et al., (2019)	USA	Afghan	627	Longitudinal, retrospective	Peer-review	Combat/war zone	Army	100	Not specified	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist (PCL; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996); Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, & Williams, 1999).	Self-report	10	no
199	Nillni et al., (2014)	USA	Iraq/Afghan	2,332	cross-sectional	Peer-review	not specified	Army, Navy, Air Force, Marines, Coast Guard	48.50	Mean age: 36.96	Sexual harassment, Witness/vicarious exposure	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist, Military Version (PCL-M; Weathers et al., 1991).	Self-report	4	no
200	Nissen et al., (2017)	Denmark	Yugoslavia/ Iraq/ Afghanistan/ others locations	9,695	Longitudinal, prospective	Peer-review	not specified	Army	94.70	Age range:<25 - 50+	Deployment-related trauma unspecified	Not applicable	PTSD	Psychological Reactions Following International Missions Questionnaire (PRIM; Karstoft & Nielsen, 2017).	Self-report	7	no

201	Nissen et al., (2019)	Denmark	Yugoslavia/ Iraq/Afghan	9,716	cross-sectional	Peer-review	Combat/war zone	Army	Not provided	Mean age: 19.6	Combat exposure	Not applicable	Depression	Eight Item PRIM - Depression Scale (Karstoft et al., 2017).	Self-report	8	no
202	Nordmo et al., (2020)	Norway	Gulf of Aden	278	Longitudinal, prospective	Peer-review	Peacekeeping	Navy	Not provided	Not specified	Not applicable	civilian support	Psychological distress	Psychological distress measured by 12-item General Helath Questionnaire (Goldberg & Williams, 1988)	Self-report	10	yes
203	Nordstrand et al., (2019)	Norway	Afghan	4,053	cross-sectional	Peer-review	Combat/war zone	Military personnel	91.7	Age range: 1 20-50+	Combat exposure, Witness/vicarious exposure, Moral challenge unspecified	Not applicable	PTSD, Depression, Anxiety	Posttraumatic Symptom Scale (PTSS; Holen, Sund, & Weisæth, 1983); Depression subscale of the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983); Anxiety subscale of the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983).	Self-report	5	yes
204	Olson et al., (2018)	USA	not specif	12,166	cross-sectional	peer-review	Combat/war zone	Air Force	87	Majority 26- 35 year age range	Combat exposure	Not applicable	PTSD	Primary Care PTSD Screen (PC-PTSD; Prins, Ouimette, Kimerling, Cameron, Hugelshofer, Shaw-Hegwer… & Sheikh, 2003).	Self-report	6	yes
205	Orsillo et al., (1998)	USA	Somalia	3,461	cross-sectional	Peer-review	Peacekeeping	Military personnel	93.5	Mean age: 26.02	Combat exposure, Frustration, Witnessed moral stressor	Positive deployment experiences, Pride in team/military	Depression, Anxiety, Psychological distress	Brief Symptom Inventory - Depression Subscale (BSI; Derogatis & Spencer, 1982); Brief Symptom Inventory - Anxiety Subscale (BSI; Derogatis & Spencer, 1982); Brief Symptom Inventory - Global Severity Index (BSI; Derogatis & Spencer, 1982);	Self-report	3	yes
206	Osinubi et al., (2012)	USA	Iraq/Afghan	489	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard, Reserve	80.8	Mean age: 32.4	Combat exposure	Not applicable	Mental health functioning	36-item Short Form Health Survey (SF36) (Ware & Sherbourne, 1992).	Self-report	5	yes
207	Osório et al., (2013)	Portugal	Afghan	113	cross-sectional	Peer-review	not specified	Army Special Operations	Not provided	Mean age: 26.7	Combat exposure, Physical demands	Not applicable	PTSD	17-item Response to Traumatic Event Scale (RTES; McIntyre & Ventura, 1996).	Self-report	5	yes
208	Park et al., (2017)	USA	Iraq/Afghanistan / other locations	630	cross-sectional	Peer-review	not specified	Military personnel	62.22	Mean age:35.72	Combat exposure	Acceptance/emotion-focused	PTSD	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Wilkins, Lang, & Norman, 2011).	Self-report	4	yes

209	Penix, Kim, et al., (2019a)	USA	Afghan	237	cross-sectional	Peer-review	Combat/war zone	Military health-care personnel (21 veterinary and 216 non-veterinary)	Not provided	Not specified	Combat exposure, Professional difficulties/demands	Positive leadership perceptions, Supervisor / leadership support, Team/colleague support, Various coping strategies/ stress recovery activities	PTSD, secondary trauma, anxiety, depression	Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); WRAIR Secondary Traumatic Stress Inventory (WRAIR-STSI, Penix et al., 2019); The Generalized Anxiety Disorder-7: Anxiety Screen (GAD-7, Spitzer, Kroenke, Williams, & Lowe, 2006); Patient Health Questionnaire (PHQ-	Self-report		8	no
210	Penix, Whitmer, et al., (2019)	USA	Afghan	237	cross-sectional	Peer-review	Combat/war zone	Health care personnel	57	Not specified	Professional difficulties/demands,Combat exposure,	Supervisor / leadership support, Various coping strategies/ stress recovery activities	Secondary traumtic stress, performance, burnout	8-item WRAIR Secondary Traumatic Stress Inventory (developed for study); job performance (developed for study; e.g., "I am able to recover my focus between patients"); Emotional exhaustion subscales from the abbreviated Maslach Burnout Inventory (McManus, Smithers,	Self-report		5	no
211	Peterson et al., (2019)	USA	Iraq	1,138	cross-sectional	Peer-review	not specified	Military medical personnel	51	Age range: 18-60+	Combat exposure, Professional difficulties/demands	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		8	yes
212	Phillips et al., (2010)	USA	Iraq/Afghan	706	Longitudinal, prospective	Peer-review	not specified	Marines	100	Age range: 17-31	Combat exposure, Perceived threat, Witness/vicarious exposure, deployment characteristics	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993).	Self-report		9	yes
213	Pietrzak et al., (2010)	USA	Iraq/Afghan	272	cross-sectional	Peer-review	not specified	Army, Air Force, Marines, Reserve	Not provided	Mean age: 34.90	Combat exposure	Team/colleague support	PTSD, Depression, Perceived resilience	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); -item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001); Connor-Davidson Resilience Scale (Connor & Davison, 2003).	Self-report		4	yes
214	Plumb et al., (2014)	USA	Middle East	348	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard, Reserve	87.4	Mean age:34.46	Combat exposure	Not applicable	PTSD, Depression, Anxiety	Posttraumatic Stress Disorder Checklist Military (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001); The Generalized Anxiety Disorder-7: Anxiety Screen (GAD-7, Spitzer, Kroenke, Williams, & Lowe, 2006).	Self-report		4	no
215	Pollmann et al., (2021)	Denmark	Afghan	473	Longitudinal, prospective	Peer-review	Combat/war zone	Army	95	Median age: 23	Combat exposure	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist for DSM-IV (PCL-C; Weathers et al., 1993)	Self-report		9	no
216	Polusny et al., (2011)	USA	Iraq	424	Longitudinal, prospective	Peer-review	Combat/war zone	Army (National Guard)	87.7	Age range: 18-30+	Combat exposure, Witness/vicarious exposure, Perceived threat	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993).	Self-report		11	yes

217	Polusny et al., (2014)	USA	Iraq/Afghan	801	Longitudinal, prospective	Peer-review	Combat/war zone	National Guard	87.79	Males mean age = 31, Females mean age= 27.2	Combat exposure, Witness/vicarious exposure, Sexual harassment	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993).	Self-report	10	no
218	Polusny et al., (2017)	USA	Iraq	522	Longitudinal, prospective	Peer-review	Combat/war zone	National Guard	88.49	Age range: 18–57	Combat exposure, Witness/vicarious exposure, Perceived threat	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993).	Self-report	11	yes
219	Porter et al., (2018)	USA	Iraq/Afghan	20,719	cross-sectional	Peer-review	not specified	Army, Navy, Air Force, Marines	75.9	Mean age: 34.68	Combat exposure	Not applicable	Depression, PTSD	Depression subscale of the Patient Health Questionnaire (PHQ-8; Spitzer, Kroenke, & Williams, 1999; Wells, Horton, LeardMann, Jacobson, & Boyko, 2013); 17-item Posttraumatic Stress Disorder Checklist – Civilian version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993)	Self-report	7	no
220	Portnoy et al., (2018)	USA	Iraq/Afghan	665	Longitudinal, retrospective	Peer-review	Combat/war zone	Military personnel	44.8	Mean age: 33.4	Combat exposure	General social support, Job-design resources	Positive psychological functioning	Connor-Davidson Resilience Scale (CDRISC 10; Campbell-Sills & Stein, 2007; Windle et al., 2011).	Self-report	9	no
221	Quartana et al., (2015)	USA	Iraq	587	cross-sectional	Peer-review	Combat/war zone	Miltiary personnel	82.4	Mostly between 18-29	Combat exposure	Not applicable	PTSD, Depression	17-item National Center for Posttraumatic Stress Disorder Checklist (Blanachard et al., 1996); 9-item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001).	Self-report	6	yes
222	Ragsdale et al., (2021)	USA	Afghan	101	Longitudinal, prospective	Peer-review	Combat/war zone	National guard (infantry)	98	Mostly between 22-30 years old (48%)	Combat exposure, Problematic family life/functioning	Not applicable	PTSD, depression	PTSD Checklist, short scale (Bliese et al., 2008); Patient Health Questionnaire (PHQ-2; Kroenke et al., 2003),	Self-report	9	yes
223	Rawlings (2011)	USA	not specif	140	cross-sectional	Thesis	not specified	Army	75	Age range: 18-50+	Deployment characteristics	Not applicable	Positive psychological functioning	14-item Ego-Resilience Scale (ER89; Block & Kremen, 1996).	Self-report	3	yes
224	Reddy (2010)	USA	Iraq	104	Longitudinal, prospective	Thesis	Combat/war zone	Army (National Guard)	87	Mean age:35.5	Combat exposure, Avoidance coping	Acceptance/emotion-focused, Problem-focused/Approach coping	Depression, PTSD	Beck Depression Inventory-II (BDI-II; Beck et al., 1996); 17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard et al., 1996).	Self-report	10	yes

225	Reed (2017)	USA	not specif	5,284	cross-sectional	Thesis	War Zone/non War zone	Army	89	Mean age: 22.78	Combat exposure	Team-based resources	Performance, anxiety, depression, PTSD	5-items from the 2008 Department of Defense Survey of Health Related Behaviors among Active Duty Military Personnel (DoD Survey; RTI International, 2008); The World Health Organization Composite International Diagnostic Interview Screening Scale (CIDI-SC; Kessler	Self-report		7	yes
226	Reed-Fitzke et al., (2020)	USA	not specif	5,283	cross-sectional	Peer-review	Combat/war zone	Army	89	Mean age: 22.78	combat exposure	Not applicable	Performance, anxiety, depression, PTSD	Perceived performance 5- items from the 2008 Department of Defense Survey of Health Related Behaviors (RTI International, 2008), 6-item screening version of the PTSD checklist (PCL-S; Wilkins, Lang, & Norman, 2011) , CIDI-SC Major Depressive Episode Scale (MDE; Kessler et al., 2010), The	Self-report		8	no
227	Renshaw (2010)	USA	Iraq/Afghan	189	cross-sectional	Peer-review	Combat/war zone	Air Force	98	Mean age: 35	General harassment , Perceived threat, Combat exposure, Witness/vicarious exposure	Team/colleague support	PTSD	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993)	Self-report		5	yes
228	Renshaw et al., (2009)	USA	Iraq	50	cross-sectional	Peer-review	not specified	Army (National Guard)	100	Mean age: 33.72	Combat exposure	Not applicable	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); 20-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977).	Self-report		7	no
229	Riolli et al., (2010)	USA	Iraq	632	cross-sectional	Peer-review	Combat/war zone	Army	99	Median age=25	Perceived threat, Other negative appraisals	Dispositional resource, Positive deployment experiences	Psychological distress	53-item Brief Symptom Checklist (BSI; Derogatis & Melisaratos, 1983).	Self-report		6	yes
230	Ritov et al., (2014)	Israel	West bank/Gaza	147	cross-sectional	Peer-review	Combat/war zone	Army	100	Mean age: 27.45	Moral challenge unspecified	Not applicable	PTSD	25-item DSM-IV Test for PTSD Diagnosis (Solomon, 1988; Schellekes, 1998).	Self-report		6	no
231	Riviere et al., (2011)	USA	Iraq	4,034	cross-sectional	Peer-review	Combat/war zone	National Guard	95	Age range: 18-40+	Combat exposure	Not applicable	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); Patient Health Questionnaire (PHQ–9; Spitzer et al., 1999).	Self-report		6	yes
232	Rodrigues et al., (2010)	USA	Iraq/Afghan/ other Middle East and non-Middle East locations	218	cross-sectional	Peer-review	not specified	National Guard, Reserve	100	Mean age: 35.12	Combat exposure	Acceptance/emotion-focused, Problem-focused/Approach coping	PTSD	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report		7	yes

233	Rona et al., (2007)	UK	Iraq	5,547	cross-sectional	Peer-review	not specified	Army, Navy, Air Force, Marines	Not provided	Not specified	Violation of expectations	Not applicable	PTSD, Psychological distress	Psychological distress measured by 12-item General Helath Questionnaire (Goldberg & Williams, 1988); 17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard et al., 1996).	Self-report	6	no
234	Rosen et al., (1999)	USA	Persian Gulf	1,025	cross-sectional	Peer-review	Combat/war zone	Army	83.51	Male mean age=28.9, Female mean age=26.3	Combat exposure, difficult living and working conditions, Professional difficulties/demands	Dispositional resource, Team-based resources	Psychological distress	53-item Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983).	Self-report	3	no
235	Rowan et al., (2020)	USA	Iraq/ Afghan	113	cross-sectional	Peer-review	Combat/war zone	Air Force	53	Not specified	Combat exposure, difficult living and working conditions	Job-design resources, Meaning/purpose	Depression	2 items from Patient Health Questionnaire (Kroeneke et al., 2003).	Self-report	4	yes
236	Russell et al., (2016)	USA	not specif	537	cross-sectional	Peer-review	Combat/war zone	Army Special Operations	88.1	Mean age: 30.9	Combat exposure	Civilian support (e.g., friends, family), Motivational, Supervisor / leadership support, Team/colleague support	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993); Patient Health Questionnaire–9 (PHQ-9; Kroenke & Spitzer, 2002).	Self-report	4	yes
237	Russell et al., (2019)	USA	Iraq/Afghan	83	Longitudinal, prospective	Peer-review	Combat/war zone	Combat medics	79.5	Mean age: 28.3	Combat exposure, Witness/vicarious exposure, Perceived threat	Dispositional resource	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); Patient Health Questionnaire (Kroenke, Spitzer, & Williams, 2001).	Self-report	10	yes
238	Sanders et al., (2019)	USA	Iraq/Afghan	298	Longitudinal, retrospective	Peer-review	Combat/war zone	National Guard, Reservist, Army	50.4	Mean age:37.8	Combat exposure, Sexual harassment, problematic family life/functioning, Concerns/worries	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers et al., 2013); Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	9	yes
239	Sandweiss et al., (2011)	USA	Iraq/Afghan	22,630	Longitudinal, prospective	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, Reserve	81.46	Not specified	Combat exposure	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C; Weathers et al., 1993).	Self-report	10	no
240	Schaubroeck et al., (2011)	USA	Iraq	633	cross-sectional	Peer-review	Combat/war zone	Army	99	Mean age: 26.74	Combat exposure, Perceived threat, Other negative appraisals	Dispositional resource, Positive deployment experiences	Anxiety, Depression	6-item Anxiety Brief Symptom Checklist and 5-item Depression Brief Symptom Checklist (BSI; Derogatis & Melisaratos, 1983)	Self-report	5	yes

241	Schok et al., (2011)	Netherlands	Indonesia/Korea/ New Guinea/Cambodi a Yugoslavia	1,561	cross-sectional	Peer-review	War Zone/non War zone	Army, Navy, Air Force, other military personnel	100	Mean age: 57.7	Perceived threat	Not applicable	Psychological distress	The Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979; Dutch version, Brom & Kleber, 1985; Van der Ploeg, Mooren, Kleber, van der Velden, & Brom, 2004).	Self-report	7	yes
242	Searle et al., (2017)	Australia	Afghan	1,122	Longitudinal, prospective	Peer-review	not specified	Army, Navy, Airforce	90.37	Mean age:31.12	Deployment-related trauma unspecified	Not applicable	PTSD, Depression	Posttraumatic Checklist Civilian Version (PCL-C; Weathers et al., 1993); Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	12	yes
243	Seelig et al., (2010)	USA	Iraq/Afghan	41,225	Longitudinal cohort	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard	Not provided	Currently deployed mean age= 32.2, Completed 1 deployment mean age= 33.1	Combat exposure	Not applicable	Anxiety/Panic	PRIME-MD Patient Health Questionnaire (PHQ; Spitzer, Kroenke, & Williams, 1999).	Self-report	9	no
244	Seelig et al., (2012)	USA	Iraq/Afghan/othe r	17,481	Longitudinal, retrospective	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines	Peri-deployment: 84.5%; post-deployment: 82.5%	Peri-deployment mean age: 32.2; post-deployment mean age: 33.1	Deployment characteristics	Not applicable	Any mental ill-health problem (i.e., meeting cut off for PTSD, anxiety, depression)	Posttraumatic Stress Disorder Checklist – Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); PRIME-MD Patient Health Questionnaire (PHQ; Spitzer et al., 1999).	Self-report	10	no
245	Segal et al., (2020)	Israel	Israeli disputed territories/ boarders		Longitudinal, prospective	Peer-review	Combat/war zone	Army	100	Mean age: 18.8	combat exposure	Not applicable	PTSD	17-item National Center for PTSD Checklist-Military Version (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996)	Self-report	11	no
246	Sharkansky et al., (2000)	USA	Gulf	1,058	longitudinal, retrospective	Peer-review	Combat/war zone	Army	90	Mean age: 30	Combat exposure	Problem-focused/Approach coping	Depression, PTSD	35-item Mississippi Scale for Combat-Related PTSD (Keane, Caddell, & Taylor, 1988); Depression scale of the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982).	Self-report	7	yes
247	Shea et al., (2013)	USA	Iraq/Afghan	238	cross-sectional	Peer-review	Combat/war zone	National Guard, Reserves	92	Mean age: 33.5	Trait vulnerability, Problematic family life/functioning, difficult living and working conditions, Combat exposure	Job-design resources, Team/colleague support	PTSD	Clinician Administered PTSD Scale, DSM-IV Version (CAPS; Blake et al., 1995).	Clinical assessment	5	yes
248	Shea et al., (2017)	USA	Iraq/Afghan	206	cross-sectional	Peer-review	Combat/war zone	National Guard, Reserve	93	Mean age: 33.79	Perceived threat, Witness/vicarious exposure, Combat exposure	Not applicable	PTSD, depression, anxiety	Clinician Administered PTSD Scale for DSM-IV (CAPS-IV; Blake et al., 1995); 53-item Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983).	Self-report and clinical assessment	5	no

249	Shen et al., (2010)	USA	Iraq/Afghan	678,227	cross-sectional	Peer-review	not specified	Army, Navy, Air Force, Marines	Army = 88.7, Marines=96.3, Navy=87.4, Air Force=84.1	Army mean age: 27.7, Marines mean age: 23.4, Navy mean age: 27, Air Force mean age: 28.5	Deployment characteristics	Not applicable	PTSD	The Standard Inpatient Data Record, the Standard Ambulatory Data Record, and the TRICARE Encounter Data.	Clinical assessment	3	yes
250	Shen et al., (2017)	USA	Iraq/Afghan	63,186	Longitudinal, prospective	Peer-review	Combat/war zone	Army	90	Mean age: 21.66	Witness/vicarious exposure, Combat exposure, Perceived threat	Not applicable	Depression, PTSD	Primary Care PTSD Screen (PC-PTSD; Ouimette et al., 2008); 2-item Patient Health Questionnaire (PHQ-2; Kroenke et al., 2003).	Self-report	8	no
251	Sheriff et al., (2020)	Australia	Afghan	1,009	Longitudinal, prospective	Peer-review	not specified	Army, Navy, Air Force	100	Mean age: 30.7	combat exposure	Not applicable	Psychological distress	The Kessler Distress Scale (K10) (Kessler et al., 2002)	Self-report	9	no
252	Shipherd et al., (2016)	USA	not specif	1,521	cross-sectional	Peer-review	not specified	Army	90.20	Mean age: 28.51	Combat exposure	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993).	Self-report	8	no
253	Shipherd et al., (2018)	USA	not specif	1,524	cross-sectional	Peer-review	not specified	Army	90.02624672	Mean age: 28.51	Combat exposure	Not applicable	PTSD, Psychological distress	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); 21-teim Depression Anxiety Stress Scales-21 (DASS-21; Lovibond & Lovibond, 1995).	Self-report	5	yes
254	Simmons et al., (2012)	USA	Iraq/Afghan	350	cross-sectional	Thesis	Combat/war zone	Army	95	Mean age: 25.24	Difficult living and working conditions, Concerns/worries, Perceived threat, Witness/vicarious exposure, Sexual harassment	Dispositional resource, Team/colleague support	PTSD, depression, anxiety, positive psychological functioning	17-item Posttraumatic Stress Disorder Checklist - Military version (PCL-M; Keenet al., 2008; Weathers et al., 1993); 20-item Centre for Epidemiological Studies Depression Scale (CES-D); Breslau, 1986; Irwin et al., 1999; Shean & Baldwin, 2008); Generalized Anxiety Disorder 7 (GAD-7; Spitzer	Self-report	9	yes
255	Simms et al., (2020)	UK	Iraq and Afghanistan operations between the Persian Gulf and South Atlantic	3,401	cross-sectional	Peer-review	not specified	Army, Navy, Air Force	89	Majority 25–39 years (53%)	Not applicable	job resources	Psychological distress, PTSD	Psychological distress measured by 12-item General Helath Questionnaire (Goldberg & Williams, 1988); PostTraumatic Stress Disorder Checklist-Civilian version (PCL-C; Weathers et al., 1994).	Self-report	5	yes
256	Simons et al., (2020)	USA	not specif	276	cross-sectional	Peer-review	not specified	not specified	86	Mean age: 33.31 (SD = 6.57)	combat exposure, sexual harassment	Not applicable	PTSD	17-item National Center for PTSD Checklist-Military Version (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996)	Self-report	4	no

257	Sipos, Bar-Haim, et al., (2014)	USA	Iraq	61	cross-sectional	Peer-review	Combat/war zone	Army	86	Mostly 24+	Combat exposure	Not applicable	PTSD, Anxiety	Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); 7-item Generalized Anxiety Disorder (GAD-7) (Spritzer et al., 2006)	Self-report	7	no
258	Sipos, Foran et al., (2014)	USA	Iraq	272	cross-sectional	Peer-review	Combat/war zone	Army	86	Mostly between 30-39	Combat exposure	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	5	yes
259	Sipos, Wood, et al., (2014)	USA	Horn of Africa	505	cross-sectional	Peer-review	Peacekeeping	National Guard, Reserve	89.90	Age range: 118-40+	Combat exposure, Concerns/worries	Meaning/purpose, Positive leadership perceptions, Team-based resources	PTSD, depression, anxiety	17-item Posttraumatic Stress Disorder Checklist (PCL; Riviere, Edens, et al., 2011); Patient Health Questionnaire for Depression (PHQ-9; Kroenke, Spitzer, & Williams, 2001); Generalized Anxiety Disorder scale (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006).	Self-report	4	no
260	Skopp et al., (2011)	USA	not specif	2,896	cross-sectional	Peer-review	not specified	Army	Not provided	Mean age:27.4	Combat exposure	Meaning/purpose	PTSD	Primary Care Posttraumatic Stress Disorder screen (PCPTSD; Prins et al., 2003).	Self-report	8	yes
261	Slusarcick et al., (1999)	USA	Persian Gulf	250	cross-sectional	Peer-review	Combat/war zone	Military health care personnel	55	Mean age: 28.5	Stress/Anxiety/tension/fear	Not applicable	Anxiety, Depression	Single item rating for stressors of working onboard a hospital ship using a seven-point Likert scale in which 1 equaled "not at all stressful" and 7 equaled "extremely stressful"; Symptom Checklist 90 (SCL-90; Derogatis et al., 1976).	Self-report	5	no
262	Slusarcick et al., (2001)	USA	Persian Gulf	250	cross-sectional	Peer-review	Combat/war zone	Navy (Healhcare specialists)	66	Mean age:28.5	Stress/Anxiety/tension/fear	Not applicable	Depression	Zung-Self-Rating scale (Zung, 1965)	Self-report	5	yes
263	Smith et al., (2017)	USA	Iraq/ Afghan	469	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard. Reserves	40.1	Mean age: 35.27	Combat exposure, Sexual harassment, Concerns/worries	General social support	PTSD	7-item Posttraumatic Stress Disorder Checklist Military (PCL-M; Blanchard,Jones-Alexander, Buckley, & Forneris,1996; Weathers, Litz, Herman, Huska, & Keane,1993).	Self-report	9	yes
264	Sørensen et al., (2016)	Netherlands	Afghan	428	Longitudinal, prospective	Peer-review	Combat/war zone	Military personnel	Not provided	Mean age: 24	Combat exposure	Not applicable	PTSD	Structured Clinical interview for DSM IV Axis 1 disorders, Research Version, Patient Edition (SCID I/P) (First et al., 2002)	Self-report	11	yes

265	Souza et al., (2008)	Brazil	Haiti	138	Longitudinal, prospective	Peer-review	Peacekeeping	Army	Not provided	Mean age: 28.7	Stress/Anxiety/tension/fear	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers et al., 1993).	Self-report	8	yes
266	Springer (2020)	USA	Afghan, Iraq	133	Longitudinal, prospective	Thesis	Combat/war zone	Army	0	Not specified	combat exposure	team based resources	PTSD	17-item Posttraumatic Stress Disorder Checklist for DSM-IV (PCL-C; Weathers et al., 1993)	Self-report	9	yes
267	Stanton et. al., (2021)	USA	Afghan, Iraq	134	cross-sectional	Peer-review	not specified	not specified	0	Mean age: 37.1 (SD = 8.7)	combat exposure, general harassment	Not applicable	PTSD, depression	PTSD Checklist (PCL; Weathers et al., 1993); Center for Epidemiological Studies—Depression scale (CES–D; Andresen et al., 1994)	Self-report	7	yes
268	Steele et al., (2017)	Australia	Iraq	212	Longitudinal, retrospective	Peer-review	not specified	Army	100	Age range: 19 - 52 (median = 27)	Anger/Aggression, Deployment-related trauma unspecified	Adequate sleep	PTSD, psychological distress	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993); Kessler Psychological Distress Scale 10 (K10; Kessler et al., 2002).	Self-report	6	no
269	Stein et al., (2015)	USA	Afghan	4,645	Longitudinal, prospective	Peer-review	Combat/war zone	Army	Not provided	Mainly less than 30 years of age (71.6%) (SE=1.4%)	Combat exposure	Not applicable	PTSD, Psychological diagnosis	17-item Posttraumatic Stress Disorder Checklist (Wilkins et al., 2011; Composite International Diagnostic Interview Screening Scales (Kessler & Ustun, 2004).	Self-report	10	no
270	Stetz et al., (2014)	USA	not specif	272	cross-sectional	Peer-review	Combat/war zone	Air Force	94	Mostly 25-34 years (54%)	Professional difficulties/demands , Physical demands, Combat exposure	Not applicable	PTSD, Depression	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; 1993); Patient Health Questionnaire 9 (PHQ-9; Kroenke et al., 2001).	Self-report	3	yes
271	Steudte-Schmiedgen et al., (2015)	Germany	Afghan	90	Longitudinal, prospective	Peer-review	not specified	Army	100	HCC sample mean age = 27.68, TSST sample mean age = 27.78	Deployment-related trauma unspecified, Physiological biomarkers	Not applicable	PTSD	Munich Composite International Diagnostic Interview (DIA-X/M-CIDI; Wittchen and Pfister, 1997).	Self-report	8	yes
272	Stuart et al., (1998)	USA	Kuwait/ Persian Gulf	1,895	cross-sectional	Peer-review	Combat/war zone	Army	90	Mean age: 31	Combat exposure, Witness/vicarious exposure, Problematic family life/functioning, difficult living and working conditions, Concerns/worries	Not applicable	Psychological distress	Brief Symptom Inventory (BSI; Boulet & Boss, 1991).	Self-report	6	yes

273	Swinkels et al., (2013)	USA	Iraq/Afghan	1,640	group comparison	Peer-review	not specified	Military personnel	79.70	Mean age: 37.4	Combat exposure	Not applicable	PTSD, depression, panic	Structured Clinical Interview for DSMIV-TR Axis I Disorders (SCIDI/P; Spitzer et al., 2002).	Clinical assessment	6	no
274	Sytine et al., (2018)	USA	not specif	885	cross-sectional	Peer-review	Combat/war zone	Army	85	Not specified	Combat exposure	Not applicable	PTSD, Depression	17-item Posttraumatic Stressor Disorder Checklist (PCL; Weathers et al., 1993); Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	7	yes
275	Tackett (2011)	USA	Iraq/Afghan/other locations	223	cross-sectional	Thesis	not specified	Army (National Guard)	Not provided	Age range: 20-57	Combat exposure	Not applicable	PTSD, positive psychological functioning	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); Ego Resiliency Scale (Block & Kremen, 1996)	Self-report	7	no
276	Tait et al., (2016)	USA	Iraq/Afghan	110	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard, Reserve	80	Mean age:31.18	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Checklist Civilian Version (PCL-C; Weathers et al., 1993); Beck Depression Inventory - Second Edition (BDI-II; Beck, Steer, & Brown, 1996).	Self-report	9	no
277	Taylor et al., (2014)	USA	Afghan	3,175	cross-sectional	Peer-review	Combat/war zone	Navy	82.4	Mean age: 34.08	Combat exposure	Adequate sleep	Anxiety, Depression, PTSD	Adapted from the Other Anxiety Symptoms Module -PRIME-MD Patient Health Questionnaire (PHQ; Spitzer et al., 1999; Adaptation from; Hoge et al., 2004); Patient Health Questionnaire (PHQ-9; Spitzer et al., 1999; Adaptation from; Hoge et al., 2004); Posttraumatic Checklist Civilian	Self-report	10	yes
278	Thomas et al., (2011)	USA	Iraq	2,439	cross-sectional	Peer-review	Combat/war zone	Army	96	above 18 years	Combat exposure, Concerns/worries	Dispositional resource	PTSD, depression, performance	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 2003); 9-item Patient Health Questionnaire (PHQ-9; Spitzer et al., 1999); Work impairment (developed for study; e.g., "limited ability to do their primary military job").	Self-report	8	yes
279	Thomas et al., (2021)	Germany	Afghan	1,483	cross-sectional	Peer-review	War Zone/non War zone	Army	94.8	Mean age: 30.8 (SD = 7.7)	general harassment	Team based resources, positive leadership perceptions	anxiety, depression	Hospital Anxiety and Depression Scale (HADS-D)	Self-report	8	yes
280	Thomassen et al., (2015)	Norway	Kosovo	144	Longitudinal, prospective	Peer-review	Peacekeeping	Army	93.8	Majority 21 - 30 years (68.8%)	Not applicable	Dispositional resource, Team-based resources	Psychological distress	A Norwegian translation of The General Health Questionnaire GHQ-30 (Goldberg & Hillier, 1979; Malt, Mogstad & Refnin, 1989).	Self-report	9	yes

281	Toblin et al., (2012)	USA	Iraq/Afghan	1,522	cross-sectional	Peer-review	Combat/war zone	Army	92	Age range: 18-40+	Combat exposure	Not applicable	Depression	Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001).	Self-report	7	no
282	Ursano et al., (2018)	USA	not specif	705	cross-sectional	Peer-review	not specified	Army, Marine Corps (Reserves)	100	Mean age:32.7	Not applicable	Job-design resources	PTSD, Depression, Mental health issue	Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993); Patient Health Questionnaire 9 (PHQ-9; Kroenke et al., 2001).	Self-report	6	yes
283	van der Wal et al., (2020)	Netherlands	Afghan	963	Longitudinal, prospective	Peer-review	Combat/war zone	Army	91	Majority 21+ (87%)	combat exposure	Not applicable	PTSD	Self-Rating Inventory for PTSD (SRIP; Hovens, Bramsen, & Van der Ploeg, 2000; Hovens et al., 1994).	Self-report	11	no
284	Vasterling et al., (2010)	USA	Iraq	670	Longitudinal, prospective	Peer-review	Combat/war zone	Army	91.2	Mean age: 25	Combat exposure, Witness/vicarious exposure, Perceived threat, Problematic family life/functioning	Not applicable	PTSD	Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers et al., 2013).	Self-report	11	yes
285	Vest et al., (2017)	USA	not specif	248	cross-sectional	Peer-review	not specified	Army (National Guard, Reserve)	100	Mean age: 33.4	Combat exposure	Job-design resources, Team-based resources	PTSD, Depression, Anxiety	Posttraumatic Stress Disorder Checklist, based upon DSM-5 (Weathers et al., 2013); Patient Health Questionnaire 8 (PHQ-8; Kroenke et al., 2009); 10 items based upon the "emerging measures" from DSM-5 (Craske et al., 2013).	Self-report	6	yes
286	Vinokur et al., (2011)	USA	Iraq/ Afghan/Qatar/ Kuwait/Saudi Arabia/other	1,009	Longitudinal, retrospective	Peer-review	War Zone/non War zone	Air Force, Reserves	50	Mean age:38.2	Combat exposure, Effect on other personal functioning	Not applicable	Burnout, PTSD, Job strain	Shirom Melamed Burnout Measure (SMBM; Melamed, Shirom, Kahana, Lerman & Froom, 1999); Two item PTSD symptom scale based on Ajzen and Fishbein's theory of reasoned action (Ajzen & Fishbein, 1980); 8-item Job Strain, 6-items of which were developed by Kandel and colleagues (Kandel,	Self-report	10	yes
287	Vogt et al., (2005)	USA	Persian Gulf	317	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, Coast Guard, National Guard, Reserve	73.8	Not specified	Combat exposure, witness/vicarious exposure, perceived threat, difficult living and working conditions, concerns/worries, Sexual harassment	General social support	Depression, PTSD, Anxiety	7 items from an adapted version of the Beck Depression Inventory (BDI; Beck, Ward,Mendelson, Mock, & Erbaugh, 1961); 17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993); 7 items adapted from the Beck Anxiety Inventory (BAI; Beck	Self-report	4	no
288	Vogt et al., (2007)	USA	Persian Gulf	308	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, National Guard, Reserve	74	Mean age: 45	Perceived threat, Combat exposure	Not applicable	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	5	yes

289	Vogt et al., (2008)	USA	Iraq/Afghan	311	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, Coast Guard, Reserves	74	Mean age: 44	Combat exposure, perceived threat, difficult living and working conditions, Sexual harassment	General social support, Job-design resources	PTSD	17-item Posttraumatic Stress Disorder Checklist (Blanchard et al., 1996).	Self-report	6	no
290	Vogt et al., (2011)	USA	Iraq/Afghan	340	cross-sectional	Peer-review	Combat/war zone	Military personnel, National Guard, Reserve	42.53	Age range: 20-50+	Combat exposure, Witness/vicarious exposure, difficult living and working conditions, perceived threat	Not applicable	PTSD, Psychological distress, Depression	17-item Posttraumatic Stress Disorder Checklist - Military Version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993); The Veterans RAND Short Form (VR-12; Ware, Kosinski, & Keller, 1996); 24-item Behavior and Symptom Identification Scale (BASIS-24; Eisen, Normand,	Self-report	8	no
291	Waller et al., (2012)	Australia	Bougainville/East Timor	3,037	cross-sectional	Peer-review	Peacekeeping	Army, Navy, Air Force	>85	Age range: 20-40+	Deployment-related trauma unspecified, Perceived threat, Problematic family life/functioning, Other interpersonal demands, Professional difficulties/demands	Not applicable	PTSD, psychological distress	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Blanchard et al., 1996); Kessler Psychological Distress Scale 10 (K10; Andrews & Slade, 2001).	Self-report	4	yes
292	Watkins et al., (2016)	Canada	not specif	15,832	cross-sectional	Peer-review	War Zone/non War zone	Army, Navy, Air Force	90.7	Mean age:32.6	Difficult living and working conditions, Transgression moral stressor , Combat exposure, Witness/vicarious exposure, other interpersonal demands	Not applicable	PTSD	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1993).	Self-report	6	yes
293	Wells et al., (2010)	USA	Iraq/Afghan	40,219	Longitudinal, prospective	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines	74.69	Not specified	Combat exposure	Not applicable	Depression	9-item Patient Health Questionnaire (Spitzer et al., 2007)	Self-report	8	no
294	Welsh et al., (2015)	USA	not specif	22,150	cross-sectional	Peer-review	not specified	Air Force/ National Guard	86.4	Age range: 26–35	Other negative appraisals	Not applicable	Depression, performance	Center of Epidemiological Studies Depression Scale (CES-D; Mirowsky & Ross, 1992); Mission readiness (developed for study; e.g., "Members of this squadron would perform well in a deployment or crisis situation").	Self-report	4	no
295	Welsh et al., (2019)	USA	not specif	25,620	Longitudinal, retrospective	Peer-review	Combat/war zone	Air Force	Not provided	Not specified	Combat exposure	Not applicable	PTSD, Depression	4-item Primary Care PTSD Screen (PC-PTSD; Prins et al., 2003); 7-item Center for Epidemiological Studies Depression Scale (CES-D; Mirowsky, 1992).	Self-report	6	yes
296	Wesselmann et al., (2018)	USA	not specif	129	cross-sectional	Peer-review	not specified	Army, Reserve	80	Mean age:36.66	Perceived threat	Not applicable	PTSD, Psychological distress	20 items from PTSD Checklist for DSM-5 (PCL-5; Weathers et al., 2013); 5 items from Mental Health Inventory (Veit, 1983).	Self-report	4	no

297	Whalen (2011)	USA	Iraq	2,507	Longitudinal, retrospective	Thesis	Combat/war zone	Army	Not provided	Age range: 18-40+	Combat exposure	Job-design resources, Team-based resources	PTSD, depression, anxiety	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); Patient Health Questionnaire (PHQ; Spitzer et al., 1999).	Self-report	9	yes
298	Whybrow et al., (2016)	UK	Persian Gulf	1,393	cross-sectional	Peer-review	Training	Navy, Marines, Reserve	85.9	Mostly 25+ (71%)	Problematic family life/functioning, Deployment-related trauma unspecified	Motivational, Positive leadership perceptions, Team-based resources	Psychological distress, PTSD	12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988); 17-item Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C; Weathers et al., 1993).	Self-report	6	yes
299	Wilk et al., (2010)	USA	Iraq	1,120	cross-sectional	Peer-review	Combat/war zone	Army	96	Age range: 18-40+	Combat exposure, Perceived threat, Witness/vicarious exposure, Witnessed moral stressor, Deployment-related trauma unspecified	Team-based resources	PTSD, Depression, Anxiety	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993); Patient Health Questionnaire (PHQ; Spitzer et al., 1999).	Self-report	6	no
300	Willerton (2009)	USA	not specif	1,380	cross-sectional	Thesis	not specified	Military personnel	92.5	Mean age:25.2	Combat exposure	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers, Litz, Huska, & Keane, 1994); The Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, & Williams, 1999).	Self-report	5	no
301	Williams et al., (2019)	USA	Iraq/Afghan	50	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Marines, Reserve	92	Mean age: 32.7	Transgression moral stressor, Guilt/shame	Not applicable	PTSD, Depression	Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers et al., 2013); Mood and Anxiety Symptoms Questionnaire - Eight Items (Clark & Watson, 1991).	Self-report	9	yes
302	Wisco et al., (2017)	USA	not specif	564	cross-sectional	Peer-review	Combat/war zone	Military personnel	Not provided	Majority 60+ (58.5%)	Combat exposure, Moral challenge unspecified, Transgression moral stressor	Not applicable	Mental ill-health problem (i.e., meeting cut-off for anxiety, depression or PTSD).	Patient Health Questionnaire-4 (PHQ-4; Kroenke, Spitzer, Williams, & Löwe, 2009) and Posttraumatic Stress Disorder Checklist-5 (PCL5; Hoge, Riviere, Wilk, Herrell, & Weathers, 2014).	Self-report	4	yes
303	Witkin et al., (2021)	USA	not specif	515	cross-sectional	Peer-review	not specified	Army, National guard, special operations	95.34	Mean age: 28.38 (SD = 8.14)	Combat exposure	Not applicable	Cognitive functioning, PTSD	Delayed-recognition Working Memory task; 17-item Posttraumatic Stress Disorder Checklist for DSM-IV (PCL-C; Weathers et al., 1993)	self-report, researcher assessed	5	no
304	Wolfe et al., (1994)	USA	Vietnam	109	cross-sectional	Peer-review	Combat/war zone	Military personnel	0	Mean age: 49	Combat exposure	Not applicable	PTSD	Mississippi Scale for PTSD (Keane, Caddell, & Taylor, 1988).	Self-report	5	no

305	Wolfe et al., (1999)	USA	Gulf	2,942	Longitudinal, retrospective	Peer-review	Combat/war zone	Army, National Guard	91.84	Mean age: 30	Combat exposure	Not applicable	PTSD	Mississippi Scale for Combat-Related PTSD (Keane et al., 1988).	Self-report	7	no
306	Wood et al., (2011)	USA	Iraq	1,925	cross-sectional	Peer-review	Combat/war zone	Army, National Guard	92	Age range: 18-40+	Deployment characteristics, Combat exposure	Positive deployment experiences	PTSD, depression	17-item Posttraumatic Stress Disorder Checklist (PCL; Blanchard et al., 1996); 9-item Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, & Williams, 1999).	Self-report	4	yes
307	Woodbury (2011)	USA	Iraq/Afghan	99	cross-sectional	Thesis	Combat/war zone	Army, Navy, Air Force, Marines, National Guard, Reserve	92.6	Mean age: 31	Combat exposure	Job-design resources	Depression, Anxiety	Center for Epidemiological Studies - Depression Scale (CES-D; Radloff, 1977); The Zung Self-Rating Anxiety Scale (SAS; Zung, 1971).	Self-report	6	no
308	Woodhead et al., (2012)	UK	Iraq/Afghan	4,986	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force, Reserve	91.33	Mostly <25 years (27.5%)	Combat exposure, Witness/vicarious exposure	Not applicable	PTSD, Psychological distress	17-item Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C; Weathers et al., 1994); 12-item General Health Questionnaire (GHQ-12; Goldberg et al. 1997).	Self-report	7	no
309	Wooten (2012)	USA	Iraq/Afghanistan / other locations [i.e., Bosnia, Guantanamo Bay, Kuwait]	101	cross-sectional	Peer-review	War Zone/non War zone	Army, National Guard	0	Mean age: 37.76	Difficult and working conditions	Not applicable	PTSD, positive psychological functioning	17-item Posttraumatic Stress Disorder Checklist - Military (PCL-M; Weathers, Huska, & Keane, 1991); 10-item Connor-Davidson Resilience Scale (CDRISC-10; Campbell-Sills & Stein, 2007).	Self-report	9	yes
310	Wright et al., (2011)	USA	Iraq	522	Longitudinal, prospective	Peer-review	Combat/war zone	Army	98	Mean age: 26	Combat exposure	Not applicable	PTSD	17-items from Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993).	Self-report	7	no
311	Wright et al., (2013)	USA	Iraq	1,233	Longitudinal, retrospective	Peer-review	Combat/war zone	Military personnel	96.7	Mean age:25.5	Combat exposure	Not applicable	PTSD, depression	17-item Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993); Patient Health Questionnaire – Depression scale (PHQ-D; Spitzer, Kroenke, Williams, & the Patient Health Questionnaire Primary Case Study Group, 1999).	Self-report	8	no
312	Wright et al., (2015)	Australia	Gulf	1,938	cross-sectional	Peer-review	Combat/war zone	Army, Navy, Air Force	Not provided	Mean age: 50.1 (SD = 6.45)	Deployment-related trauma unspecified	Job-design resources, Meaning/purpose, Positive deployment experiences	Psychological distress	Latent score for: 12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988), Short Form-12 Health Survey (SF-12; Ware, Kosinski, & Keller, 1996); Composite International Diagnostic Interview (CIDI; v2.0).	Self-report	4	yes

313	Yan (2016)	USA	Iraq/Afghan	100	cross-sectional	Peer-review	not specified	Army, Navy, Air Force, Marines, National Guard	79	Mean age: 49.93	Combat exposure, Witness/vicarious exposure	Not applicable	PTSD, depression, Mental health functional impairment	17-item Posttraumatic Stress Disorder Checklist (Blanchard et al., 1996); 8-item Patient Health Questionnaire (PHQ; Kroenke et al., 2009); 12-item Short Form Health Survey (SF-12; Ware et al. 1996).	Self-report	6	yes
314	Yurgil et al., (2014)	USA	Iraq/Afghan	1,648	Longitudinal, prospective	Peer-review	Combat/war zone	Marines	Not provided	Mean age:22.4	Combat exposure	Not applicable	PTSD	17-item Clinician-Administered PTSD Scale (CAPS; Blake et al., 1996).	Clinical assessment	11	no

eTable 2: Collated Fisher's Z meta-analysis statistics for each first and second-order themes including Q-test of heterogeneity and I^2 statistic, number of contributing effect sizes, and model type used to conduct the analysis.

First-order theme	Second-order theme	Anxiety					
		Fisher's Z (95% CI)	p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	--	--	--	--	--	--
	Difficult living and working conditions	0.43 (0.29 to 0.57)	0.00	217.87 (11) [95]***	12	6	MLM
	Physical demands	0.34 (0.24 to 0.45)	--	--	1	1	Mean
	Violation of expectations	--	--	--	--	--	--
	Deployment/role features (total)	0.42 (0.3 to 0.54)	0.00	217.98 (12) [94]***	13	7	MLM
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--
	Trait vulnerability	0.14 (-0.1 to 0.38)	0.25	13.96 (2) [86]***	3	1	REM
	Dispositional vulnerabilities (total)	0.14 (-0.1 to 0.38)	0.25	13.96 (2) [86]***	3	1	REM
Interpersonal demands	General harassment	0.25 (0.19 to 0.30)	--	--	1	1	Mean
	Other interpersonal demands	--	--	--	--	--	--
	Sexual harassment	0.23 (-0.14 to 0.61)	0.23	24.26 (1) [96]***	2	2	REM
	Interpersonal demands (total)	0.24 (0.02 to 0.45)	0.03	24.26 (2) [92]***	3	3	REM
Moral challenge	Moral challenge unspecified	0.24 (0.08 to 0.4)	0.00	21.7 (2) [91]***	3	3	REM
	Transgression moral stressor	--	--	--	--	--	--
	Witnessed moral stressor	0.01 (-0.02 to 0.04)	--	--	1	1	Mean
	Moral challenge (total)	0.18 (0.02 to 0.34)	0.03	77.87 (3) [96]***	4	4	REM
Negative affective states	Anger/Aggression	--	--	--	--	--	--
	Concerns/Worries	0.38 (0.27 to 0.49)	0.00	57.08 (11) [81]***	12	4	MLM
	Frustration	0.07 (0.02 to 0.11)	0.00	10.16 (2) [80]**	3	1	REM
	Guilt/Shame	--	--	--	--	--	--
	Stress/Anxiety/Emotional tension/Fear	0.29 (0.26 to 0.32)	0.00	2.94 (2) [32]	3	2	REM
	Negative affective states (total)	0.31 (0.21 to 0.42)	0.00	387.34 (17) [96]***	18	7	MLM
Negative appraisals	Other (than threat) negative appraisals	0.54 (0.54 to 0.54)	--	--	1	1	Mean
	Perceived threat	0.28 (0.12 to 0.44)	0.00	180.94 (7) [96]***	8	8	MLM
	Negative appraisals (total)	0.28 (0.12 to 0.44)	0.00	221.69 (8) [96]***	9	8	MLM
Potentially traumatic events	Combat exposure	0.17 (0.12 to 0.22)	0.00	4363.5 (40) [99]***	41	32	MLM
	Deployment-related trauma unspecified	0.25 (-0.03 to 0.53)	0.08	216.58 (5) [98]***	6	3	MLM
	Interpersonal deployment trauma	--	--	--	--	--	--
	Witness/Vicarious exposure	0.14 (0.02 to 0.25)	0.02	40.88 (5) [88]***	6	6	MLM
	Potentially traumatic events (total)	0.18 (0.14 to 0.23)	0.00	8791.02 (52) [99]***	53	36	MLM
Professional difficulties/demands	Professional difficulties/demands (total)	0.16 (0.12 to 0.21))	--	--	1	1	Mean
Work-life interference	Problematic family life/functioning	0.09 (-0.08 to 0.26)	0.30	9.42 (1) [89]**	2	2	REM
	Effect on other personal functioning	--	--	--	--	--	--
	Work-life interference (total)	0.09 (-0.08 to 0.26)	0.30	9.42 (1) [89]**	2	2	REM
Available social support	Civilian support	--	--	--	--	--	--
	General social support	-0.56 (-0.56 to -0.56)	--	--	1	1	Mean
	Supervisor/leadership support	--	--	--	--	--	--
	Team/colleague support	-0.26 (-0.47 to -0.05)	0.01	42.46 (2) [95]***	3	3	REM
	Available social support (total)	-0.34 (-0.55 to -0.13)	0.00	92.27 (3) [97]***	4	4	REM
Other coping resources	Communication with home front	--	--	--	--	--	--
	Dispositional resource	-0.42 (-0.48 to -0.36)	0.00	1.47 (2) [0]	3	3	REM
	Motivational	--	--	--	--	--	--
	Adequate sleep	-0.61 (-0.65 to -0.56)	0.00	17.09 (3) [82]***	4	1	REM
	Religion/Spirituality	--	--	--	--	--	--
	Coping resources (total)	-0.47 (-0.58 to -0.35)	0.00	56.44 (6) [89]***	7	4	MLM
Interpersonal resources	Positive leadership perceptions	-0.21 (-0.39 to -0.03)	0.02	217.03 (6) [97]***	7	6	MLM
	Team based resources	-0.18 (-0.21 to -0.15)	0.00	388 (14) [96]***	15	10	MLM
	Interpersonal resources (total)	-0.2 (-0.27 to -0.12)	0.00	670.6 (21) [97]***	22	12	MLM
Job-design resources	Job-design resources (total)	-0.14 (-0.29 to 0.00)	0.06	172.27 (4) [98]***	5	5	MLM
Organizational resources	Military support to family	--	--	--	--	--	--
	Organizational justice	--	--	--	--	--	--
	Organizational resources (total)	--	--	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	-0.08 (-0.17 to 0.01)	--	--	1	1	Mean
	Positive deployment experiences	-0.01 (-0.09 to 0.08)	0.86	4.32 (1) [77]**	2	2	REM
	Pride in team/military	-0.05 (-0.16 to 0.07)	0.44	9.15 (2) [78]**	3	3	REM
	Positive appraisal of deployment/service (t	-0.05 (-0.07 to -0.03)	4.826E-06	48.29 (5) [90]***	6	4	MLM
Self-regulatory strategies	Acceptance/emotion-focused	0.04 (-0.08 to 0.16)	0.50	14.55 (1) [93]***	2	1	REM
	Avoidance coping	0.29 (0.27 to 0.31)	0.00	46.49 (4) [91]***	5	1	MLM
	Problem-focused/Approach coping	0.04 (-0.05 to 0.12)	0.44	8.17 (1) [88]**	2	1	REM
	Support seeking	-0.01 (-0.05 to 0.03)	--	--	1	1	Mean
	Various coping strategies/stress recovery a	-0.51 (-0.64 to -0.38)	--	--	1	1	Mean
	Self-regulatory strategies (total)	-0.17 (-0.83 to 0.49)	0.60911559	530.58 (10) [98]***	11	2	MLM

First-order theme	Second-order theme	Depression					
		Fisher's Z (95% CI)	p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	0.03 (-0.09 to 0.15)	0.58	121.61 (8) [93]***	9	5	MLM
	Difficult living and working conditions	0.37 (0.27 to 0.47)	0.00	242.71 (18) [93]***	19	12	MLM
	Physical demands	0.21 (0.02 to 0.39)	0.03	13.66 (2) [85]**	3	3	REM
	Violation of expectations	--	--	--	--	--	--
	Deployment/role features (total)	0.27 (0.18 to 0.37)	0.00	1466.35 (30) [98]***	31	19	MLM
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--
	Trait vulnerability	0.13 (0.04 to 0.22)	0.00	1.39 (2) [0]	3	1	REM
	Dispositional vulnerabilities (total)	0.13 (0.04 to 0.22)	0.00	1.39 (2) [0]	3	1	REM
Interpersonal demands	General harassment	0.23 (0.1 to 0.36)	0.00	56.35 (5) [91]***	6	5	REM
	Other interpersonal demands	--	--	--	--	--	--
	Sexual harassment	0.14 (0.03 to 0.25)	0.01	130.59 (8) [94]***	9	7	MLM
	Interpersonal demands (total)	0.16 (0.07 to 0.25)	0.00	195.43 (14) [93]***	15	10	MLM
Moral challenge	Moral challenge unspecified	0.22 (0.1 to 0.35)	0.00	13.97 (2) [86]***	3	3	REM
	Transgression moral stressor	0.32 (0.21 to 0.43)	0.00	0.78 (3) [0]	4	2	REM
	Witnessed moral stressor	0.25 (-0.23 to 0.74)	0.31	43.91 (1) [98]***	2	2	REM
	Moral challenge (total)	0.23 (0.11 to 0.36)	0.00	113.41 (8) [93]***	9	6	MLM
Negative affective states	Anger/Aggression	0.48 (0.34 to 0.61)	0.00	3.98 (1) [75]**	2	2	REM
	Concerns/Worries	0.3 (0.21 to 0.4)	0.00	121.35 (28) [77]***	29	8	MLM
	Frustration	0.08 (0.02 to 0.15)	0.01	17.18 (3) [83]***	4	2	REM
	Guilt/Shame	0.59 (0.30 to 0.88)	--	--	1	1	Mean
	Stress/Anxiety/Emotional tension/Fear	0.27 (0.2 to 0.33)	0.00	5.72 (3) [48]	4	3	REM
	Negative affective states (total)	0.31 (0.24 to 0.38)	0.00	552.91 (39) [93]***	40	16	MLM
Negative appraisals	Other (than threat) negative appraisals	0.43 (0.31 to 0.55)	0.00	64.94 (3) [95]***	4	3	REM
	Perceived threat	0.22 (0.12 to 0.32)	0.00	166.51 (15) [91]***	16	13	MLM
	Negative appraisals (total)	0.26 (0.16 to 0.35)	0.00	582.43 (19) [97]***	20	15	MLM
Potentially traumatic events	Combat exposure	0.16 (0.13 to 0.18)	0.00	17231.41 (136) [99]***	137	96	MLM
	Deployment-related trauma unspecified	0.27 (0.06 to 0.47)	0.01	268.96 (4) [99]***	5	4	MLM
	Interpersonal deployment trauma	0.07 (0.01 to 0.14)	0.03	1.4 (1) [29]	2	2	REM
	Witness/Vicarious exposure	0.18 (0.12 to 0.24)	0.00	227.44 (18) [92]***	19	15	MLM
	Potentially traumatic events (total)	0.16 (0.14 to 0.19)	0.00	20180.61 (162) [99]***	163	102	MLM
Professional difficulties/demands	Professional difficulties/demands (total)	0.39 (0.21 to 0.56)	0.00	41.83 (4) [90]***	5	4	MLM
Work-life interference	Problematic family life/functioning	0.25 (0.22 to 0.29)	0.00	27.49 (4) [85]***	5	5	REM
	Effect on other personal functioning	0.20 (0.15 to 0.25)	--	--	1	1	Mean
	Work-life interference (total)	0.2 (0.11 to 0.3)	0.00	30.25 (5) [83]***	6	6	MLM
Available social support	Civilian support	-0.29 (-0.39 to -0.2)	0.00	4.6 (2) [56]	3	2	REM
	General social support	-0.4 (-0.99 to 0.19)	0.19	9.8 (1) [90]**	2	2	REM
	Supervisor/leadership support	-0.19 (-0.38 to 0.01)	0.07	32.52(2) [94]***	3	2	REM
	Team/colleague support	-0.32 (-0.39 to -0.24)	0.00	10.34 (5) [52]	6	5	MLM
	Available social support (total)	-0.29 (-0.42 to -0.17)	0.00	116.55 (13) [89]***	14	9	MLM
Other coping resources	Communication with home front	-0.05 (-0.22 to 0.12)	--	--	1	1	Mean
	Dispositional resource	-0.27 (-0.39 to -0.15)	0.00	87.07 (8) [91]***	9	8	MLM
	Motivational	-0.64 (-0.73 to -0.56)	0.00	3.08 (1) [68]	2	2	REM
	Adequate sleep	-0.44 (-0.67 to -0.22)	0.00	94.93 (7) [93]***	8	3	MLM
	Religion/Spirituality	--	--	--	--	--	--
	Coping resources (total)	-0.35 (-0.46 to -0.23)	0.00	640.76 (19) [97]***	20	4	MLM
Interpersonal resources	Positive leadership perceptions	-0.25 (-0.33 to -0.16)	0.00	67.37 (12) [82]***	13	7	MLM
	Team based resources	-0.22 (-0.29 to -0.15)	0.00	776.83 (25) [97]***	26	17	MLM
	Interpersonal resources (total)	-0.23 (-0.3 to -0.17)	0.00	907.22 (38) [96]***	39	20	MLM
Job-design resources	Job-design resources (total)	-0.12 (-0.23 to -0.02)	0.02	96.44 (6) [94]***	7	6	MLM
Organizational resources	Military support to family	--	--	--	--	--	--
	Organizational justice	--	--	--	--	--	--
	Organizational resources (total)	--	--	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	-0.11 (-0.15 to -0.08)	0.00	22.43 (4) [82]***	5	4	REM
	Positive deployment experiences	-0.18 (-0.38 to 0.03)	0.09	268.61 (5) [98]***	6	6	MLM
	Pride in team/military	-0.16 (-0.20 to -0.13)	--	--	1	1	Mean
	Positive appraisal of deployment/service (tot	-0.16 (-0.28 to -0.03)	0.01519997	302.31 (11) [96]***	12	9	MLM
Self-regulatory strategies	Acceptance/emotion-focused	0.04 (-0.19 to 0.26)	0.74	95.41 (6) [94]***	7	3	MLM
	Avoidance coping	0.23 (0.12 to 0.35)	0.00	19.49 (5) [74]**	6	2	MLM
	Problem-focused/Approach coping	-0.1 (-0.26 to 0.06)	0.21	78.11 (4) [95]***	5	3	MLM
	Support seeking	-0.03 (-0.07 to 0.01)	--	--	1	1	Mean
	Various coping strategies/stress recovery act	-0.59 (-0.72 to -0.46)	--	--	1	1	Mean
	Self-regulatory strategies (total)	-0.14 (-0.39 to 0.12)	0.283163615	984.21 (19) [98]***	20	5	MLM

First-order theme	Second-order theme	PTSD					
		Fisher's Z (95% CI)	p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	0.07 (0 to 0.15)	0.06	11418.04 (29) [100]***	30	14	MLM
	Difficult living and working conditions	0.32 (0.21 to 0.42)	0.00	412.65 (19) [95]***	20	17	MLM
	Physical demands	0.26 (0.04 to 0.49)	0.02	20.56 (2) [90]***	3	3	REM
	Violation of expectations	0.11 (-0.02 to 0.24)	0.10	131.98 (2) [98]***	3	2	REM
	Deployment/role features (total)	0.21 (0.14 to 0.28)	0.00	12546.18 (55) [100]***	56	35	MLM
Dispositional vulnerabilities	Physiological biomarkers	-0.01 (-0.19 to 0.17)	0.90	5.07 (5) [1]	6	2	MLM
	Trait vulnerability	0.15 (0.07 to 0.24)	0.00	37.83 (7) [81]***	8	4	MLM
	Dispositional vulnerabilities (total)	0.11 (0 to 0.21)	0.04	49.27 (13) [74]***	14	6	MLM
Interpersonal demands	General harassment	0.29 (0.26 to 0.32)	0.00	61.71 (6) [90]***	7	5	REM
	Other interpersonal demands	0.1 (-0.11 to 0.32)	0.34	1288.75 (13) [99]***	14	3	MLM
	Sexual harassment	0.23 (0.15 to 0.3)	0.00	289.55 (16) [94]***	17	13	MLM
	Interpersonal demands (total)	0.2 (0.13 to 0.26)	0.00	2581.42 (37) [99]***	38	19	MLM
Moral challenge	Moral challenge unspecified	0.22 (0.19 to 0.24)	0.00	25.74 (4) [84]***	5	4	REM
	Transgression moral stressor	0.3 (0.19 to 0.4)	0.00	308.08 (13) [96]***	14	8	MLM
	Witnessed moral stressor	0.25 (0.1 to 0.39)	0.00	36.71 (11) [70]***	12	4	MLM
	Moral challenge (total)	0.27 (0.2 to 0.35)	0.00	379.22 (30) [92]***	31	14	MLM
Negative affective states	Anger/Aggression	0.38 (0.19 to 0.57)	0.00	32.16 (3) [91]***	4	3	REM
	Concerns/Worries	0.34 (0.23 to 0.45)	0.00	136.34 (8) [94]***	9	7	MLM
	Frustration	0.13 (0.02 to 0.24)	0.02	45.83 (3) [93]***	4	3	REM
	Guilt/Shame	1.21 (0.93 to 1.48)	0.00	9.42 (2) [79]**	3	3	REM
	Stress/Anxiety/Emotional tension/Fear	0.33 (0.24 to 0.42)	0.00	89.88 (9) [90]***	10	7	MLM
	Negative affective states (total)	0.43 (0.29 to 0.57)	0.00	1260.66 (29) [98]***	30	23	MLM
Negative appraisals	Other (than threat) negative appraisals	0.26 (0.09 to 0.43)	0.00	154.78 (8) [95]***	9	4	MLM
	Perceived threat	0.36 (0.28 to 0.44)	0.00	4311.37 (47) [99]***	48	33	MLM
	Negative appraisals (total)	0.35 (0.27 to 0.42)	0.00	4582.2 (56) [99]***	57	36	MLM
Potentially traumatic events	Combat exposure	0.29 (0.27 to 0.31)	0.00	83621.01 (338) [100]***	339	197	MLM
	Deployment-related trauma unspecified	0.28 (0.17 to 0.39)	0.00	5156.97 (27) [99]***	28	16	MLM
	Interpersonal deployment trauma	0.27 (0.16 to 0.37)	0.00	339.72 (11) [97]***	12	8	MLM
	Witness/Vicarious exposure	0.24 (0.19 to 0.3)	0.00	4759.17 (66) [99]***	67	37	MLM
	Potentially traumatic events (total)	0.29 (0.26 to 0.31)	0.00	95003.18 (445) [100]***	446	217	MLM
Professional difficulties/demands	Professional difficulties/demands (total)	0.28 (0.17 to 0.39)	0.00	566.07 (20) [96]***	21	13	MLM
Work-life interference	Problematic family life/functioning	0.17 (0.06 to 0.29)	0.00	906.87 (15) [98]***	16	10	MLM
	Effect on other personal functioning	0.45 (0.27 to 0.62)	0.00	118.23 (3) [97]***	4	2	REM
	Work-life interference (total)	0.21 (0.1 to 0.32)	0.00	1642.2 (19) [99]***	20	12	MLM
Available social support	Civilian support	-0.28 (-0.29 to -0.26)	0.00	28.39 (4) [86]***	5	3	MLM
	General social support	-0.15 (-0.29 to -0.01)	0.04	31.05 (5) [84]***	6	5	MLM
	Supervisor/leadership support	-0.28 (-0.41 to -0.14)	0.00	10.86 (2) [82]**	3	3	MLM
	Team/colleague support	-0.21 (-0.27 to -0.15)	0.00	180.6 (20) [89]***	21	16	MLM
	Available social support (total)	-0.2 (-0.25 to -0.15)	0.00	324.19 (34) [90]***	35	25	MLM
Other coping resources	Communication with home front	-0.11 (-0.15 to -0.07)	0.00	1.74 (1) [43]	2	1	MLM
	Dispositional resource	-0.21 (-0.33 to -0.1)	0.00	231.74 (15) [94]***	16	13	MLM
	Motivational	-0.41 (-0.59 to -0.22)	0.00	75.43 (2) [97]***	3	3	MLM
	Adequate sleep	-0.52 (-0.67 to -0.38)	0.00	20.3 (6) [70]**	7	3	MLM
	Religion/Spirituality	-0.39 (-0.39 to -0.39)	--	--	1	1	MLM
	Coping resources (total)	-0.29 (-0.38 to -0.2)	0.00	1493.21 (28) [98]***	29	20	MLM
Interpersonal resources	Positive leadership perceptions	-0.27 (-0.35 to -0.19)	0.00	312.63 (17) [95]***	18	10	MLM
	Team based resources	-0.2 (-0.24 to -0.17)	0.00	1061.12 (36) [97]***	37	8	MLM
	Interpersonal resources (total)	-0.22 (-0.25 to -0.19)	0.00	1461.87 (54) [96]***	55	31	MLM
Job-design resources	Job-design resources (total)	-0.04 (-0.18 to 0.1)	0.58	1592.58 (14) [99]***	15	10	MLM
Organizational resources	Military support to family	-0.3 (-0.31 to -0.28)	0.00	0.09 (1) [0]	2	1	MLM
	Organizational justice	-0.11 (-0.17 to -0.05)	0.00	3.97 (4) [0]	5	5	MLM
	Organizational resources (total)	-0.21 (-0.39 to -0.02)	0.03	44.36 (6) [86]***	7	2	MLM
Positive appraisal of deployment/service	Meaning/Purpose	-0.08 (-0.15 to 0)	0.05	56.46 (10) [82]***	11	7	MLM
	Positive deployment experiences	-0.14 (-0.28 to 0)	0.04	262.46 (10) [96]***	11	8	MLM
	Pride in team/military	--	--	--	--	--	MLM
	Positive appraisal of deployment/service (tot	-0.11 (-0.2 to -0.03)	0.007020795	349.09 (21) [94]***	22	14	MLM
Self-regulatory strategies	Acceptance/emotion-focused	0.17 (-0.04 to 0.39)	0.11	291.42 (12) [96]***	13	6	MLM
	Avoidance coping	0.35 (0.18 to 0.52)	0.00	3.08 (1) [68]	2	2	MLM
	Problem-focused/Approach coping	-0.03 (-0.18 to 0.12)	0.69	172.12 (5) [97]***	6	5	MLM
	Support seeking	--	--	--	--	--	MLM
	Various coping strategies/stress recovery act	-0.37 (-0.48 to -0.25)	0.00	10.72 (3) [72]**	4	3	MLM
	Self-regulatory strategies (total)	-0.03 (-0.19 to 0.12)	0.665782927	1100.54 (24) [98]***	25	11	MLM

First-order theme	Second-order theme	Burnout					
		Fisher's Z (95% CI)	p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	0.02 (-0.07 to 0.1)	0.74	1.38 (1) [28]	2	1	REM
	Difficult living and working conditions	--	--	--	--	--	--
	Physical demands	--	--	--	--	--	--
	Violation of expectations	0.15 (0.11 to 0.19)	0.00	8.96 (7) [22]	8	1	MLM
	Deployment/role features (total)	0.09 (-0.05 to 0.22)	0.20	20.56 (9) [56]**	10	2	MLM
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--
	Trait vulnerability	--	--	--	--	--	--
	Dispositional vulnerabilities (total)	--	--	--	--	--	--
Interpersonal demands	General harassment	--	--	--	--	--	--
	Other interpersonal demands	--	--	--	--	--	--
	Sexual harassment	--	--	--	--	--	--
	Interpersonal demands (total)	--	--	--	--	--	--
Moral challenge	Moral challenge unspecified	--	--	--	--	--	--
	Transgression moral stressor	--	--	--	--	--	--
	Witnessed moral stressor	--	--	--	--	--	--
	Moral challenge (total)	--	--	--	--	--	--
Negative affective states	Anger/Aggression	--	--	--	--	--	--
	Concerns/Worries	--	--	--	--	--	--
	Frustration	--	--	--	--	--	--
	Guilt/Shame	--	--	--	--	--	--
	Stress/Anxiety/Emotional tension/Fear	0.23 (0.15 to 0.3)	0.00	0.47 (1) [0]	2	1	REM
	Negative affective states (total)	0.23 (0.15 to 0.3)	0.00	0.47 (1) [0]	2	1	REM
Negative appraisals	Other (than threat) negative appraisals	--	--	--	--	--	--
	Perceived threat	0.16 (0.01 to 0.32)	--	--	1	1	Mean
	Negative appraisals (total)	0.16 (0.01 to 0.32)	--	--	1	1	Mean
Potentially traumatic events	Combat exposure	0.21 (0.15 to 0.26)	0.00	0.19 (1) [0]	2	2	REM
	Deployment-related trauma unspecified	--	--	--	--	--	--
	Interpersonal deployment trauma	--	--	--	--	--	--
	Witness/Vicarious exposure	--	--	--	--	--	--
	Potentially traumatic events (total)	0.21 (0.15 to 0.26)	0.00	0.19 (1) [0]	2	2	REM
Professional difficulties/demands	Professional difficulties/demands (total)	0.15 (0.02 to 0.27)	0.02	7.35 (2) [73]**	3	2	REM
Work-life interference	Problematic family life/functioning	--	--	--	--	--	--
	Effect on other personal functioning	0.2 (0.17 to 0.23)	0.00	89.21 (4) [96]***	5	1	MLM
	Work-life interference (total)	0.2 (0.17 to 0.23)	0.00	89.21 (4) [96]***	5	1	MLM
Available social support	Civilian support	--	--	--	--	--	--
	General social support	--	--	--	--	--	--
	Supervisor/leadership support	-0.31 (-0.37 to -0.24)	0.00	1.37 (2) [0]	3	2	REM
	Team/colleague support	--	--	--	--	--	--
	Available social support (total)	-0.31 (-0.37 to -0.24)	0.00	1.37 (2) [0]	3	2	REM
Other coping resources	Communication with home front	--	--	--	--	--	--
	Dispositional resource	--	--	--	--	--	--
	Motivational	-0.71 (-0.86 to -0.55)	--	--	1	1	Mean
	Adequate sleep	--	--	--	--	--	--
	Religion/Spirituality	--	--	--	--	--	--
	Coping resources (total)	-0.71 (-0.86 to -0.55)	--	--	1	1	Mean
Interpersonal resources	Positive leadership perceptions	-0.24 (-0.29 to -0.19)	0.00	6.31 (4) [37]	5	2	REM
	Team based resources	-0.28 (-0.36 to -0.19)	0.00	1.27 (1) [21]	2	1	REM
	Interpersonal resources (total)	-0.23 (-0.33 to -0.13)	0.00	8.25 (6) [27]	7	2	MLM
Job-design resources	Job-design resources (total)	--	--	--	--	--	--
Organizational resources	Military support to family	--	--	--	--	--	--
	Organizational justice	--	--	--	--	--	--
	Organizational resources (total)	--	--	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	--	--	--	--	--	--
	Positive deployment experiences	--	--	--	--	--	--
	Pride in team/military	--	--	--	--	--	--
	Positive appraisal of deployment/service (to	--	--	--	--	--	--
Self-regulatory strategies	Acceptance/emotion-focused	--	--	--	--	--	--
	Avoidance coping	--	--	--	--	--	--
	Problem-focused/Approach coping	--	--	--	--	--	--
	Support seeking	--	--	--	--	--	--
	Various coping strategies/stress recovery ac	-0.34 (-0.41 to -0.28)	0.00	0.69 (2) [0]	3	2	REM
	Self-regulatory strategies (total)	-0.34 (-0.41 to -0.28)	2.93137E-25	0.69 (2) [0]	3	2	REM

First-order theme	Second-order theme	Psychological distress					
		Fisher's Z (95% CI)	p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	0.09 (0.02 to 0.16)	0.02	15469.81 (28) [100]***	29	8	MLM
	Difficult living and working conditions	0.19 (0.1 to 0.28)	0.00	193.09 (15) [92]***	16	10	MLM
	Physical demands	0.28 (0.17 to 0.38)	--	--	1	1	Mean
	Violation of expectations	0.05 (0.02 to 0.09)	0.01	4.13 (1) [76]**	2	1	REM
	Deployment/role features (total)	0.15 (0.09 to 0.2)	0.00	15760.79 (47) [100]***	48	19	MLM
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--
	Trait vulnerability	--	--	--	--	--	--
	Dispositional vulnerabilities (total)	--	--	--	--	--	--
Interpersonal demands	General harassment	--	--	--	--	--	--
	Other interpersonal demands	0.12 (0.11 to 0.14)	0.00	494.44 (11) [98]***	12	1	MLM
	Sexual harassment	--	--	--	--	--	--
	Interpersonal demands (total)	0.12 (0.11 to 0.14)	0.00	494.44 (11) [98]***	12	1	MLM
Moral challenge	Moral challenge unspecified	0.18 (-0.08 to 0.43)	0.17	13.56 (1) [93]***	2	2	REM
	Transgression moral stressor	0.14 (0.05 to 0.22)	--	--	1	1	Mean
	Witnessed moral stressor	0.11 (-0.09 to 0.31)	0.28	34.85 (1) [97]***	2	2	REM
	Moral challenge (total)	0.08 (0.05 to 0.1)	0.00	55.7 (4) [93]***	5	4	REM
Negative affective states	Anger/Aggression	0.12 (0.02 to 0.21)	0.02	0.26 (1) [0]	2	1	REM
	Concerns/Worries	0.2 (0.07 to 0.33)	0.00	372.66 (21) [94]***	22	4	MLM
	Frustration	0.07 (0.04 to 0.11)	0.00	6.52 (2) [69]**	3	1	REM
	Guilt/Shame	--	--	--	--	--	--
	Stress/Anxiety/Emotional tension/Fear	--	--	--	--	--	--
	Negative affective states (total)	0.17 (0.07 to 0.26)	0.00	423.36 (26) [94]***	27	6	MLM
Negative appraisals	Other (than threat) negative appraisals	0.59 (0.51 to 0.67)	--	--	1	1	Mean
	Perceived threat	0.25 (0.12 to 0.38)	0.00	858.66 (12) [99]***	13	7	MLM
	Negative appraisals (total)	0.27 (0.13 to 0.41)	0.00	1045.23 (13) [99]***	14	7	MLM
Potentially traumatic events	Combat exposure	0.16 (0.12 to 0.21)	0.00	3997.88 (61) [98]***	62	38	MLM
	Deployment-related trauma unspecified	0.29 (0.16 to 0.42)	0.00	2302.17 (20) [99]***	21	10	MLM
	Interpersonal deployment trauma	--	--	--	--	--	--
	Witness/Vicarious exposure	0.16 (0.11 to 0.21)	0.00	80.9 (16) [80]***	17	11	MLM
	Potentially traumatic events (total)	0.18 (0.14 to 0.23)	0.00	8643.33 (99) [99]***	100	47	MLM
Professional difficulties/demands	Professional difficulties/demands (total)	0.27 (0.04 to 0.5)	0.02	420.42 (10) [98]***	11	4	MLM
Work-life interference	Problematic family life/functioning	0.18 (0.08 to 0.27)	0.00	591.9 (15) [97]***	16	8	MLM
	Effect on other personal functioning	--	--	--	--	--	--
	Work-life interference (total)	0.18 (0.08 to 0.27)	0.00	591.9 (15) [97]***	16	8	MLM
Available social support	Civilian support	-0.37 (-0.48 to -0.25)	--	--	1	1	Mean
	General social support	--	--	--	--	--	--
	Supervisor/leadership support	--	--	--	--	--	--
	Team/colleague support	-0.14 (-0.17 to -0.12)	0.00	1.08 (2) [0]	3	3	REM
	Available social support (total)	-0.19 (-0.28 to -0.09)	0.00	14.25 (3) [79]**	4	4	REM
Other coping resources	Communication with home front	-0.15 (-0.19 to -0.11)	--	--	1	1	Mean
	Dispositional resource	-0.24 (-0.37 to -0.11)	0.00	123.4 (9) [93]***	10	6	MLM
	Motivational	-0.33 (-0.49 to -0.17)	0.00	37.42 (2) [95]***	3	3	REM
	Adequate sleep	-0.28 (-0.5 to -0.07)	0.01	74.94 (3) [96]***	4	3	REM
	Religion/Spirituality	0.05 (-0.09 to 0.19)	--	--	1	1	Mean
	Coping resources (total)	-0.24 (-0.34 to -0.15)	0.00	311.76 (18) [94]***	19	12	MLM
Interpersonal resources	Positive leadership perceptions	-0.21 (-0.3 to -0.11)	0.00	92.46 (7) [92]***	8	5	MLM
	Team based resources	-0.22 (-0.28 to -0.16)	0.00	1037.97 (17) [98]***	18	10	MLM
	Interpersonal resources (total)	-0.23 (-0.28 to -0.17)	0.00	1153.82 (25) [98]***	26	11	MLM
Job-design resources	Job-design resources (total)	-0.15 (-0.32 to 0.03)	0.10	587.52 (10) [98]***	11	7	MLM
Organizational resources	Military support to family	-0.16 (-0.19 to -0.13)	0.00	0.34 (1) [0]	2	1	REM
	Organizational justice	--	--	--	--	--	--
	Organizational resources (total)	-0.16 (-0.19 to -0.13)	0.00	0.34 (1) [0]	2	1	REM
Positive appraisal of deployment/service	Meaning/Purpose	-0.36 (-0.62 to -0.1)	0.01	28.98 (2) [93]***	3	2	REM
	Positive deployment experiences	-0.11 (-0.23 to 0.02)	0.09	121.18 (4) [97]***	5	4	MLM
	Pride in team/military	-0.17 (-0.20 to -0.14)	--	--	1	1	Mean
	Positive appraisal of deployment/service (tot	-0.18 (-0.31 to -0.06)	0.004111001	186.75 (8) [96]***	9	5	MLM
Self-regulatory strategies	Acceptance/emotion-focused	0.17 (-0.1 to 0.43)	0.21	254.83 (8) [97]***	9	4	MLM
	Avoidance coping	0.37 (0.44 to 0.29)	--	--	1	1	Mean
	Problem-focused/Approach coping	-0.01 (-0.07 to 0.05)	--	--	1	1	Mean
	Support seeking	--	--	--	--	--	--
	Various coping strategies/stress recovery act	-0.25 (-0.73 to 0.23)	0.31	22.15 (1) [95]***	2	2	REM
	Self-regulatory strategies (total)	0.02 (-0.23 to 0.27)	0.871042272	363.6 (12) [97]***	13	5	MLM

First-order theme	Second-order theme	Positive psychological functioning					
		Fisher's Z (95% CI)	p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	-0.15 (-0.32 to 0.02)	--	--	1	1	Mean
	Difficult living and working conditions	-0.25 (-0.34 to -0.17)	0.00	12.5 (5) [60]**	6	6	MLM
	Physical demands	--	--	--	--	--	--
	Violation of expectations	--	--	--	--	--	--
	Deployment/role features (total)	-0.23 (-0.3 to -0.17)	0.00	13.49 (6) [56]**	7	7	MLM
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--
	Trait vulnerability	--	--	--	--	--	--
	Dispositional vulnerabilities (total)	--	--	--	--	--	--
Interpersonal demands	General harassment	--	--	--	--	--	--
	Other interpersonal demands	--	--	--	--	--	--
	Sexual harassment	-0.35 (-0.46 to -0.25)	--	--	1	1	Mean
	Interpersonal demands (total)	-0.35 (-0.46 to -0.25)	--	--	1	1	Mean
Moral challenge	Moral challenge unspecified	--	--	--	--	--	--
	Transgression moral stressor	-0.37 (-0.48 to -0.25)	--	--	1	1	Mean
	Witnessed moral stressor	--	--	--	--	--	--
	Moral challenge (total)	-0.37 (-0.48 to -0.25)	--	--	1	1	Mean
Negative affective states	Anger/Aggression	--	--	--	--	--	--
	Concerns/Worries	-0.12 (-0.23 to -0.02)	--	--	1	1	Mean
	Frustration	--	--	--	--	--	--
	Guilt/Shame	-1.07 (-1.19 to -0.96)	--	--	1	1	Mean
	Stress/Anxiety/Emotional tension/Fear	--	--	--	--	--	--
	Negative affective states (total)	-0.6 (-1.53 to 0.34)	0.21	141.75 (1) [99]***	2	2	REM
Negative appraisals	Other (than threat) negative appraisals	--	--	--	--	--	--
	Perceived threat	-0.56 (-0.95 to -0.18)	0.00	24.18 (1) [96]***	2	2	REM
	Negative appraisals (total)	-0.56 (-0.95 to -0.18)	0.00	24.18 (1) [96]***	2	2	REM
Potentially traumatic events	Combat exposure	-0.22 (-0.43 to -0.01)	0.04	68.18 (4) [94]***	5	5	MLM
	Deployment-related trauma unspecified	--	--	--	--	--	--
	Interpersonal deployment trauma	--	--	--	--	--	--
	Witness/Vicarious exposure	0.00 (-0.11 to 0.11)	--	--	1	1	Mean
	Potentially traumatic events (total)	-0.18 (-0.37 to 0.01)	0.06	81.99 (5) [94]***	6	6	MLM
Professional difficulties/demands	Professional difficulties/demands (total)	--	--	--	--	--	--
Work-life interference	Problematic family life/functioning	--	--	--	--	--	--
	Effect on other personal functioning	--	--	--	--	--	--
	Work-life interference (total)	--	--	--	--	--	--
Available social support	Civilian support	--	--	--	--	--	--
	General social support	0.30 (0.21 to 0.39)	--	--	1	1	Mean
	Supervisor/leadership support	--	--	--	--	--	--
	Team/colleague support	0.44 (0.37 to 0.52)	0.00	0.2 (1) [0]	2	2	REM
	Available social support (total)	0.39 (0.29 to 0.49)	0.00	6.04 (2) [67]**	3	3	REM
Other coping resources	Communication with home front	0.62 (0.48 to 0.76)	--	--	1	1	Mean
	Dispositional resource	--	--	--	--	--	--
	Motivational	--	--	--	--	--	--
	Adequate sleep	--	--	--	--	--	--
	Religion/Spirituality	--	--	--	--	--	--
	Coping resources (total)	0.62 (0.48 to 0.76)	--	--	1	1	Mean
Interpersonal resources	Positive leadership perceptions	--	--	--	--	--	--
	Team based resources	--	--	--	--	--	--
	Interpersonal resources (total)	--	--	--	--	--	--
Job-design resources	Job-design resources (total)	0.32 (0.23 to 0.41)	--	--	1	1	Mean
Organizational resources	Military support to family	--	--	--	--	--	--
	Organizational justice	--	--	--	--	--	--
	Organizational resources (total)	--	--	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	--	--	--	--	--	--
	Positive deployment experiences	--	--	--	--	--	--
	Pride in team/military	--	--	--	--	--	--
	Positive appraisal of deployment/service (to	--	--	--	--	--	--
Self-regulatory strategies	Acceptance/emotion-focused	--	--	--	--	--	--
	Avoidance coping	--	--	--	--	--	--
	Problem-focused/Approach coping	--	--	--	--	--	--
	Support seeking	--	--	--	--	--	--
	Various coping strategies/stress recovery ac	--	--	--	--	--	--
	Self-regulatory strategies (total)	--	--	--	--	--	--

First-order theme	Second-order theme	Cognitive function				
		p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	--	--	--	--	--
	Difficult living and working conditions	--	--	--	--	--
	Physical demands	0.00	0.48 (2) [0]	3	1	REM
	Violation of expectations	--	--	--	--	--
	Deployment/role features (total)	0.00	0.48 (2) [0]	3	1	REM
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--
	Trait vulnerability	--	--	--	--	--
	Dispositional vulnerabilities (total)	--	--	--	--	--
Interpersonal demands	General harassment	--	--	--	--	--
	Other interpersonal demands	--	--	--	--	--
	Sexual harassment	--	--	--	--	--
	Interpersonal demands (total)	--	--	--	--	--
Moral challenge	Moral challenge unspecified	--	--	--	--	--
	Transgression moral stressor	--	--	--	--	--
	Witnessed moral stressor	--	--	--	--	--
	Moral challenge (total)	--	--	--	--	--
Negative affective states	Anger/Aggression	--	--	--	--	--
	Concerns/Worries	--	--	--	--	--
	Frustration	--	--	--	--	--
	Guilt/Shame	--	--	--	--	--
	Stress/Anxiety/Emotional tension/Fear	--	--	1	1	Mean
	Negative affective states (total)	--	--	1	1	Mean
Negative appraisals	Other (than threat) negative appraisals	--	--	--	--	--
	Perceived threat	--	--	--	--	--
	Negative appraisals (total)	--	--	--	--	--
Potentially traumatic events	Combat exposure	0.89	6 (19) [0]	20	3	MLM
	Deployment-related trauma unspecified	--	--	--	--	--
	Interpersonal deployment trauma	--	--	--	--	--
	Witness/Vicarious exposure	--	--	--	--	--
	Potentially traumatic events (total)	0.89	6 (19) [0]	20	3	MLM
Professional difficulties/demands	Professional difficulties/demands (total)	--	--	--	--	--
Work-life interference	Problematic family life/functioning	--	--	--	--	--
	Effect on other personal functioning	--	--	--	--	--
	Work-life interference (total)	--	--	--	--	--
Available social support	Civilian support	--	--	--	--	--
	General social support	--	--	--	--	--
	Supervisor/leadership support	--	--	--	--	--
	Team/colleague support	--	--	--	--	--
	Available social support (total)	--	--	--	--	--
Other coping resources	Communication with home front	--	--	--	--	--
	Dispositional resource	--	--	--	--	--
	Motivational	--	--	--	--	--
	Adequate sleep	--	--	--	--	--
	Religion/Spirituality	--	--	--	--	--
	Coping resources (total)	--	--	--	--	--
Interpersonal resources	Positive leadership perceptions	--	--	--	--	--
	Team based resources	--	--	--	--	--
	Interpersonal resources (total)	--	--	--	--	--
Job-design resources	Job-design resources (total)	--	--	--	--	--
Organizational resources	Military support to family	--	--	--	--	--
	Organizational justice	--	--	--	--	--
	Organizational resources (total)	--	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	--	--	--	--	--
	Positive deployment experiences	--	--	--	--	--
	Pride in team/military	--	--	--	--	--
	Positive appraisal of deployment/service (to	--	--	--	--	--
Self-regulatory strategies	Acceptance/emotion-focused	--	--	--	--	--
	Avoidance coping	--	--	--	--	--
	Problem-focused/Approach coping	--	--	--	--	--

	Support seeking	--	--	--	--	--
	Various coping strategies/stress recovery ac	--	--	--	--	--
	Self-regulatory strategies (total)	--	--	--	--	--

First-order theme	Second-order theme	Job performance					
		Fisher's Z (95% CI)	p	Q (df) [I^2]	#Effx	k	Model type
Demanding deployment/role features	Deployment characteristics	--	--	--	--	--	--
	Difficult living and working conditions	--	--	--	--	--	--
	Physical demands	--	--	--	--	--	--
	Violation of expectations	--	--	--	--	--	--
	Deployment/role features (total)	--	--	--	--	--	--
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--
	Trait vulnerability	--	--	--	--	--	--
	Dispositional vulnerabilities (total)	--	--	--	--	--	--
Interpersonal demands	General harassment	--	--	--	--	--	--
	Other interpersonal demands	--	--	--	--	--	--
	Sexual harassment	--	--	--	--	--	--
	Interpersonal demands (total)	--	--	--	--	--	--
Moral challenge	Moral challenge unspecified	--	--	--	--	--	--
	Transgression moral stressor	--	--	--	--	--	--
	Witnessed moral stressor	--	--	--	--	--	--
	Moral challenge (total)	--	--	--	--	--	--
Negative affective states	Anger/Aggression	--	--	--	--	--	--
	Concerns/Worries	-0.21 (-0.25 to -0.17)	--	--	1	1	Mean
	Frustration	--	--	--	--	--	--
	Guilt/Shame	--	--	--	--	--	--
	Stress/Anxiety/Emotional tension/Fear	--	--	--	--	--	--
	Negative affective states (total)	-0.21 (-0.25 to -0.17)	--	--	1	1	Mean
Negative appraisals	Other (than threat) negative appraisals	-0.28 (-0.29 to -0.27)	--	--	1	1	Mean
	Perceived threat						
	Negative appraisals (total)	-0.28 (-0.29 to -0.27)	--	--	1	1	Mean
Potentially traumatic events	Combat exposure	-0.09 (-0.13 to -0.05)	0.00	11.12 (3) [73]**	4	4	REM
	Deployment-related trauma unspecified	--	--	--	--	--	--
	Interpersonal deployment trauma	--	--	--	--	--	--
	Witness/Vicarious exposure	--	--	--	--	--	--
	Potentially traumatic events (total)	-0.09 (-0.13 to -0.05)	0.00	11.12 (3) [73]**	4	4	REM
Professional difficulties/demands	Professional difficulties/demands (total)	0.08 (-0.05 to 0.21)	--	--	1	1	Mean
Work-life interference	Problematic family life/functioning	-0.44 (-0.60 to -0.27)	--	--	1	1	Mean
	Effect on other personal functioning	--	--	--	--	--	--
	Work-life interference (total)	-0.44 (-0.60 to -0.27)	--	--	1	1	Mean
Available social support	Civilian support	--	--	--	--	--	--
	General social support	--	--	--	--	--	--
	Supervisor/leadership support	0.30 (0.17 to 0.43)	--	--	1	1	Mean
	Team/colleague support	--	--	--	--	--	--
	Available social support (total)	0.30 (0.17 to 0.43)	--	--	1	1	Mean
Other coping resources	Communication with home front	0.05 (-0.12 to 0.22)	--	--	1	1	Mean
	Dispositional resource	0.20 (0.16 to 0.24)	--	--	1	1	Mean
	Motivational	--	--	--	--	--	--
	Adequate sleep	--	--	--	--	--	--
	Religion/Spirituality	--	--	--	--	--	--
	Coping resources (total)	0.15 (0.01 to 0.29)	0.04	3.12 (1) [68]	2	2	REM
Interpersonal resources	Positive leadership perceptions	--	--	--	--	--	--
	Team based resources	0.21 (0.18 to 0.24)	--	--	1	1	Mean
	Interpersonal resources (total)	0.21 (0.18 to 0.24)	--	--	1	1	Mean
Job-design resources	Job-design resources (total)	--	--	--	--	--	--
Organizational resources	Military support to family	--	--	--	--	--	--
	Organizational justice	--	--	--	--	--	--
	Organizational resources (total)	--	--	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	--	--	--	--	--	--
	Positive deployment experiences	--	--	--	--	--	--
	Pride in team/military	--	--	--	--	--	--
	Positive appraisal of deployment/service (to	--	--	--	--	--	--
Self-regulatory strategies	Acceptance/emotion-focused	--	--	--	--	--	--
	Avoidance coping	--	--	--	--	--	--
	Problem-focused/Approach coping	--	--	--	--	--	--
	Support seeking	--	--	--	--	--	--
	Various coping strategies/stress recovery ac	0.44 (0.31 to 0.56)	--	--	1	1	Mean
	Self-regulatory strategies (total)	0.44 (0.31 to 0.56)	--	--	1	1	Mean

Supplementary Results

eTable 3. Significant moderation analyses for deployment type (combat/war-zone [1] vs non-combat/non-war zone [0]) for first-order themes. Negative moderator coefficient indicates a weaker association for combat/war-zone deployments, positive moderator coefficient indicates stronger association for combat/war-zone deployments.

Outcome	First-order theme	Moderator coefficient	*SE*	*p*-value	CI 95% LL	CI 95% UL
Burnout	Demanding deployment/role features	-0.135	0.0616	0.028	-0.2559	-0.015
Depression	Professional difficulties	0.407	0.078	<.001	0.2541	0.560
Psych distress	Interpersonal resources	0.129	0.0534	0.016	0.0238	0.233
	Job-design resources	0.139	0.0638	0.029	0.0144	0.264
	Negative appraisals of deployment	-0.253	0.0211	<.001	-0.2944	-0.212
	Positive appraisals of deployment	-0.099	0.0386	0.011	-0.1743	-0.023
	Potentially traumatic events	-0.121	0.0204	<.001	-0.1606	-0.081
	Professional difficulties	0.092	0.0211	<.001	0.0503	0.133
PTSD	Interpersonal demands	-0.218	0.0149	<.001	-0.2468	-0.188
	Potentially traumatic events	-0.134	0.0194	<.001	-0.1715	-0.095
	Professional difficulties	-0.067	0.0209	0.001	-0.1084	-0.026
	Work/life interference	0.078	0.0208	<.001	0.0369	0.119

eTable 4. Significant moderation analyses for sample size and risk of bias across first and second-order themes.

Outcome	First or second order theme	Sample Size			Risk of Bias		
		***p*-value**	***Q* test statistic for moderator**	**Unstandardized coefficient relating to moderator**	***p*-value**	***Q* test statistic for moderator**	**Unstandardized coefficient relating to moderator**
Anxiety	Coping resources (first-order)	--	--	--	.032	4.59	-0.03
	Potentially traumatic events (first-order)	.011	6.42	<.001	--	--	--
	Self-regulatory strategies (first-order)	<.001	24.84	<.001	<.001	24.84	-0.22
	Combat exposure (second-order)	.011	6.43	<.001	--	--	--
	Deployment-related trauma unspecified (second-order)	.004	8.43	<.001	--	--	--
	Positive leadership perceptions (second-order)	--	--	--	.016	5.84	-0.08
Burnout	Demanding deployment/role features (first-order)	.028	4.82	.003	.028	4.82	0.03
Depression	Interpersonal demands (first-order)	--	--	--	--	--	--
	Moral challenge (first-order)	.027	4.92	<-.001	.015	5.88	0.05
	Potentially traumatic events (first-order)	<.001	14.16	<.001	--	--	--
	Job-design resources (first-order)	--	--	--	<.001	77.98	0.06
	Meaning/purpose (second-order)	--	--	--	.031	4.68	0.07
	Combat exposure (second-order)	<.001	14.19	<.001	--	--	--
	Deployment characteristics (second-order)	.003	9.13	<.001	--	--	--
	Deployment-related trauma unspecified (second-order)	<.001	62.61	<-.001	--	--	--
	Positive leadership perceptions (second-order)	.008	6.98	<.001	--	--	--
	Adequate sleep (second-order)	.012	6.35	<-.001	--	--	--
	Sexual harassment (second-order)	.043	4.11	<.001	--	--	--
	Team/colleague support (second-order)	--	--	--	.032	4.57	0.02
Psych distress	Job-design resources (first-order)	<.001	22.27	<.001	--	--	--

	Moral challenge (first-order)	--	--	--	<.001	51.20	0.07
	Negative affective states (first-order)	--	--	--	<.001	8.06	0.04
	Negative appraisals (first-order)	<.001	142.88	<.001	--	--	--
	Potentially traumatic events (first-order)	.010	6.55	<.001	--	--	--
	Professional difficulties/demands (first-order)	<.001	14.07	<-.001	--	--	--
	Self-regulatory strategies (first-order)	0.048	3.92	<.001	--	--	--
	Combat exposure (second-order)	0.011	6.51	<.001	--	--	--
	Concerns/worries (second-order)	--	--	--	<.001	11.27	0.07
	Deployment-related trauma unspecified (second-order)	<.001	144.46	<.001	--	--	--
	Difficult living and working conditions (second-order)	.038	4.31	<-.001	--	--	--
	Perceived threat (second-order)	<.001	142.77	<.001	--	--	--
	Witness/vicarious exposure (second-order)	0.015	5.87	<-.001	--	--	--
PTSD	Available social support (first-order)	<.001	11.33	<.001	--	--	--
	Interpersonal demands (first-order)	<.001	40.80	<.001	--	--	--
	Moral challenge (first-order)	<.001	82.17	<-.001	--	--	--
	Negative appraisals (first-order)	.001	10.60	<.001	--	--	--
	Organizational-resources (first-order)	<.001	12.40	<-.001	<.001	12.40	0.09
	Professional difficulties/demands (first-order)	.004	8.33	<.001	--	--	--
	Work/life interference (first-order)	.034	4.51	<-.001	--	--	--
	Physiological biomarkers (second-order)	.048	3.92	.005	--	--	--
	Civilian support (second-order)	<.001	21.97	<.001			
	Combat exposure (second-order)	--	--	--	.047	3.92	-0.01
	Deployment-related trauma unspecified (second-order)	<.001	100.42	<.001	--	--	--
	Problematic family life/functioning (second-order)	.046	3.98	<-.001	--	--	--
	Meaning/purpose (second-order)	--	--	--	--	--	--
	Other interpersonal demands (second-order)	<.001	214.37	<.001	--	--	--

Other negative appraisals (second-order)	.048	3.91	<.001	--	--	--
Perceived threat (second-order)	.002	9.36	<.001	.035	4.44	-0.03
Professional difficulties	.004	8.33	<.001			
Sexual harassment (second-order)	<.001	35.33	<.001	--	--	--
Transgression moral stressor (second-order)	<.001	87.38	<-.001	--	--	--

Note: studies with a small number of contributing effects, the power of these tests is limited, and caution should be applied when interpreting non-significant effects. Given the aim was to explore and synthesize the breadth of available research, rather than confirm specific estimates, our precautionary checks were applied within underpowered samples in some thematic categories in order to gauge trends across the range of themes.

eTable 5. Significant moderation analyses for study design (longitudinal [1] vs correlational [0]) for first-order themes. Negative moderator coefficient indicates a weaker association for longitudinal designs, positive moderator coefficient indicates stronger association for longitudinal designs.

Outcome	**First-order theme**	**Moderator coefficient**	***SE***	***p*-value**	**CI 95% LL**	**CI95% UL**
Anxiety	Job-design resources	0.2691	0.134	0.0446	0.0065	0.5317
Burnout	Demanding deployment/role features	0.1353	0.0616	0.0281	0.0146	0.2559
Depression	Job-design resources	0.2247	0.0451	<.001	0.1363	0.3131
Psych distress	Job-design resources	-0.3185	0.1391	0.0221	-0.5912	-0.0458
	Potentially traumatic events	-0.0999	0.0486	0.0397	-0.1951	-0.0047
PTSD	Negative affective states	-0.3179	0.1378	0.021	-0.5879	-0.0479
	Negative appraisals	-0.2012	0.0736	0.0063	-0.3455	-0.0568
	Organizational-resources	0.1892	0.0537	0.0004	0.0839	0.2946
	Potentially traumatic events	-0.0607	0.024	0.0116	-0.1078	-0.0136

eTable 6. Significant moderation analyses for original effect size type grouped by correlates considered deployment related-resources versus deployment-related demands. Negative moderator coefficient indicates a weaker association for the effect size type in reference to the reference group, positive coefficient indicates stronger association for the effect size type with reference to the reference group.

Outcome	Resource/ demand category	*Q* test statistic for moderator (*p*-value)	Reference group	Correlation: Unstandardised coefficient relating to moderator (*p*-value)	Standard mean difference: Unstandardised coefficient relating to moderator (*p*-value)	Odds ratio: Unstandardised coefficient relating to moderator (*p*-value)	Beta observed Unstandardised coefficient relating to moderator (*p*-value)	Hazard ratio: Unstandardised coefficient relating to moderator (*p*-value)
Anxiety	Resources	9.587 (*p*=.022)	Beta estimate calculated	-0.133 (*p*=.411)	--	-0.318 (*p*=.069)	**-0.512 (*p*=.024)**	--
Burnout	Demands	54.466 (*p*<.001)	Beta estimate observed	**0.188 (*p*<.001)**	--	--	--	--
Depression	Demands	38.122 (*p*<.001)	Beta estimate calculated	**0.156 (*p*<.001)**	-0.105 (*p*=.302)	0.042 (*p*=.329)	0.041 (*p*=.432)	--
Psych distress	Demands	18.636 (*p*<.001)	Beta estimate calculated	0.022 (*p*=.678)	--	-0.081 (*p*=.176)	0.136 (*p*=.072)	--
PTSD	Demands	110.067 (*p*<.001)	Beta estimate calculated	**0.225 (*p*<.001)**	0.009 (*p*=.932)	0.054 (*p*=.096)	**0.123 (*p*<.001)**	0.112 (*p*=.454)
	Resources	18.071 (*p*<.001)	Beta estimate calculated	-0.052 (*p*=.674)	--	0.124 (*p*=.335)	0.059 (*p*=.685)	--

eTable 7. Significant moderation analyses for bivariate [0] versus multivariate [1] origin models grouped by correlates considered deployment related-resources versus deployment-related demands. Negative moderator coefficient indicates a weaker association for multivariate models, a positive coefficient indicates stronger association for multivariate models.

Outcome	Resource/ demand category	*Q* test statistic for moderator (*p*-value)	Moderator coefficient (*p*-value)	*SE*	CI 95% LL	CI95% UL
Burnout	Demands	24.705 ($p<.001$)	-0.109($p<.001$)	0.022	-0.1514	-0.0658
Depression	Demands	4.815 ($p=.030$)	-0.036($p=.027$)	0.016	-0.0684	-0.004
Performance	Resources	17.31 ($p=.002$)	0.219($p<.001$)	0.055	0.1111	0.326
Psych distress	Resources	33.735 ($p<.001$)	0.139($p<.001$)	0.024	0.0921	0.186
Positive psychological functioning	Resources	19.39 ($p<.001$)	0.445($p<.001$)	0.065	0.3184	0.5716

eTable 8. Significant moderation analyses for the number of covariates in origin models grouped by correlates considered deployment related-resources versus deployment-related demands. Negative moderator coefficient indicates a weaker association for models where the original effect size extracted had a higher number of covariates. Positive coefficient indicates a stronger association for origin models with a higher number of covariates.

Outcome	Resource/ demand category	*Q* test statistic for moderator (*p*-value)	Moderator coefficient (*p*-value)	*SE*	CI 95% LL	CI95% UL
Depression	Resources	4.795 ($p=.029$)	-0.033 ($p=.029$)	0.015	-0.062	-0.004
Psych distress	Demands	15.153 ($p<.001$)	-0.014 ($p<.001$)	0.004	-0.021	-0.007
PTSD	Demands	20.149 ($p<.001$)	0.020 ($p<.001$)	0.004	0.011	0.029

eTable 9: Number and proportion of effect size types from original studies for each of the main meta-estimate calculations

		Anxiety						Depression						PTSD						Burnout			
		Original estimate						Original estimate						Original estimate						Original estimate			
		Beta estimate calculated	Beta estimate observed	Correlation	Hazard ratio	Odds ratio	Total	Beta estimate calculated	Beta estimate observed	Correlation	Odds ratio	Standard mean difference	Total	Beta estimate calculated	Beta estimate observed	Correlation	Hazard ratio	Odds ratio	Standard mean difference	Total	Beta estimate observed	Correlation	Odds ratio	Total
First-order theme	**Second-order theme**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**
Demanding deployment/role features	Deployment characteristics	--	--	--	--	--	--	1 (11.1%)	--	3 (33.3%)	5 (55.6%)	--	9 (100%)	1 (3.3%)	--	5 (16.7%)	--	24 (80%)	--	30 (100%)	--	2 (100%)	--	2 (100%)
	Difficult living and working conditions	4 (33.3%)	1 (8.3%)	4 (33.3%)	--	3 (25%)	12 (100%)	6 (31.6%)	3 (15.8%)	7 (36.8%)	3 (15.8%)	--	19 (100%)	1 (5%)	3 (15%)	12 (60%)	--	4 (20%)	--	20 (100%)	--	--	--	--
	Physical demands	--	--	1 (100%)	--	--	1 (100%)	1 (33.3%)	--	2 (66.7%)	--	--	3 (100%)	1 (33.3%)	--	2 (66.7%)	--	--	--	3 (100%)	--	--	--	--
	Violation of expectations	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1 (33.3%)	--	2 (66.7%)	--	3 (100%)	--	8 (100%)	--	8 (100%)
	Deployment/role features (total)	4 (30.8%)	1 (7.7%)	5 (38.5%)	--	3 (23.1%)	13 (100%)	8 (25.8%)	3 (9.7%)	12 (38.7%)	8 (25.8%)	--	31 (100%)	3 (5.4%)	3 (5.4%)	20 (35.7%)	--	30 (53.6%)	--	56 (100%)	--	10 (100%)	--	10 (100%)
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--	--	--	--	--	--	--	4 (66.7%)	2 (33.3%)	--	--	--	--	6 (100%)	--	--	--	--
	Trait vulnerability	--	--	3 (100%)	--	--	3 (100%)	--	--	3 (100%)	--	--	3 (100%)	3 (37.5%)	--	4 (50%)	--	1 (12.5%)	--	8 (100%)	--	--	--	--
	Dispositional vulnerabilities (total)	--	--	3 (100%)	--	--	3 (100%)	--	--	3 (100%)	--	--	3 (100%)	7 (50%)	2 (14.3%)	4 (28.6%)	--	1 (7.1%)	--	14 (100%)	--	--	--	--
Interpersonal demands	General harassment	--	--	1 (100%)	--	--	1 (100%)	1 (16.7%)	--	4 (66.7%)	1 (16.7%)	--	6 (100%)	2 (28.6%)	--	4 (57.1%)	--	1 (14.3%)	--	7 (100%)	--	--	--	--
	Other interpersonal demands	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14 (100%)	--	14 (100%)	--	--	--	--
	Sexual harassment	--	1 (50%)	1 (50%)	--	--	2 (100%)	3 (33.3%)	2 (22.2%)	4 (44.4%)	--	--	9 (100%)	2 (11.8%)	3 (17.6%)	10 (58.8%)	--	2 (11.8%)	--	17 (100%)	--	--	--	--
	Interpersonal demands (total)	--	1 (33.3%)	2 (66.7%)	--	--	3 (100%)	4 (26.7%)	2 (13.3%)	8 (53.3%)	1 (6.7%)	--	15 (100%)	4 (10.5%)	3 (7.9%)	14 (36.8%)	--	17 (44.7%)	--	38 (100%)	--	--	--	--
Moral challenge	Moral challenge unspecified	1 (33.3%)	--	2 (66.7%)	--	--	3 (100%)	1 (33.3%)	--	2 (66.7%)	--	--	3 (100%)	1 (20%)	--	--	2 (40%)	--	--	5 (100%)	--	--	--	--
	Transgression moral stressor	--	--	--	--	--	--	--	--	4 (100%)	--	--	4 (100%)	--	--	11 (78.6%)	--	3 (21.4%)	--	14 (100%)	--	--	--	--
	Witnessed moral stressor	1 (100%)	--	--	--	--	1 (100%)	1 (50%)	--	1 (50%)	--	--	2 (100%)	--	2 (16.7%)	10 (83.3%)	--	--	--	12 (100%)	--	--	--	--
	Moral challenge (total)	2 (50%)	--	2 (50%)	--	--	4 (100%)	2 (22.2%)	--	7 (77.8%)	--	--	9 (100%)	1 (3.2%)	2 (6.5%)	23 (74.2%)	--	3 (9.7%)	2 (6.5%)	31 (100%)	--	--	--	--
Negative affective states	Anger/Aggression	--	--	--	--	--	--	--	--	2 (100%)	--	--	2 (100%)	--	--	4 (100%)	--	--	--	4 (100%)	--	--	--	--
	Concerns/Worries	--	1 (8.3%)	2 (16.7%)	--	9 (75%)	12 (100%)	--	1 (3.4%)	19 (65.5%)	9 (31%)	--	29 (100%)	--	1 (11.1%)	6 (66.7%)	--	2 (22.2%)	--	9 (100%)	--	--	--	--
	Frustration	3 (100%)	--	--	--	--	3 (100%)	3 (75%)	--	1 (25%)	--	--	4 (100%)	--	2 (50%)	1 (25%)	--	1 (25%)	--	4 (100%)	--	--	--	--
	Guilt/Shame	--	--	--	--	--	--	--	--	1 (100%)	--	--	1 (100%)	--	--	3 (100%)	--	--	--	3 (100%)	--	--	--	--
	Stress/Anxiety/Emotional tension/Fear	--	--	2 (66.7%)	--	1 (33.3%)	3 (100%)	--	--	3 (75%)	1 (25%)	--	4 (100%)	--	1 (10%)	6 (60%)	--	3 (30%)	--	10 (100%)	--	2 (100%)	--	2 (100%)
	Negative affective states (total)	3 (16.7%)	1 (5.6%)	4 (22.2%)	--	10 (55.6%)	18 (100%)	3 (7.5%)	1 (2.5%)	26 (65%)	10 (25%)	--	40 (100%)	--	4 (13.3%)	20 (66.7%)	--	6 (20%)	--	30 (100%)	--	2 (100%)	--	2 (100%)
Negative appraisals	Other (than threat) negative appraisals	--	--	1 (100%)	--	--	1 (100%)	--	--	4 (100%)	--	--	4 (100%)	--	--	8 (88.9%)	--	1 (11.1%)	--	9 (100%)	--	--	--	--
	Perceived threat	--	2 (25%)	5 (62.5%)	--	1 (12.5%)	8 (100%)	1 (6.3%)	4 (25%)	9 (56.3%)	2 (12.5%)	--	16 (100%)	3 (6.3%)	7 (14.6%)	19 (39.6%)	--	19 (39.6%)	--	48 (100%)	--	1 (100%)	--	1 (100%)
	Negative appraisals (total)	--	2 (22.2%)	6 (66.7%)	--	1 (11.1%)	9 (100%)	1 (5%)	4 (20%)	13 (65%)	2 (10%)	--	20 (100%)	3 (5.3%)	7 (12.3%)	27 (47.4%)	--	20 (35.1%)	--	57 (100%)	--	1 (100%)	--	1 (100%)
Potentially traumatic events	Combat exposure	3 (7.3%)	3 (7.3%)	19 (46.3%)	1 (2.4%)	15 (36.6%)	41 (100%)	8 (5.8%)	10 (7.3%)	76 (55.5%)	41 (29.9%)	2 (1.5%)	137 (100%)	19 (5.6%)	22 (6.5%)	177 (52.2%)	1 (0.3%)	118 (34.8%)	2 (0.6%)	339 (100%)	1 (50%)	1 (50%)	--	2 (100%)
	Deployment-related trauma unspecified	--	--	1 (16.7%)	--	5 (83.3%)	6 (100%)	--	--	2 (40%)	3 (60%)	--	5 (100%)	1 (3.6%)	3 (10.7%)	7 (25%)	--	17 (60.7%)	--	28 (100%)	--	--	--	--
	Interpersonal deployment trauma	--	--	--	--	--	--	--	--	1 (50%)	1 (50%)	--	2 (100%)	--	1 (8.3%)	7 (58.3%)	--	4 (33.3%)	--	12 (100%)	--	--	--	--
	Witness/Vicarious exposure	1 (16.7%)	2 (33.3%)	2 (33.3%)	--	1 (16.7%)	6 (100%)	3 (15.8%)	6 (31.6%)	7 (36.8%)	3 (15.8%)	--	19 (100%)	11 (16.4%)	7 (10.4%)	19 (28.4%)	--	30 (44.8%)	--	67 (100%)	--	--	--	--
	Potentially traumatic events (total)	4 (7.5%)	5 (9.4%)	22 (41.5%)	1 (1.9%)	21 (39.6%)	53 (100%)	11 (6.7%)	16 (9.8%)	86 (52.8%)	48 (29.4%)	2 (1.2%)	163 (100%)	31 (7%)	33 (7.4%)	210 (47.1%)	1 (0.2%)	169 (37.9%)	2 (0.4%)	446 (100%)	1 (50%)	1 (50%)	--	2 (100%)
Professional difficulties/demands	Professional difficulties/demands (total)	--	--	1 (100%)	--	--	1 (100%)	--	1 (20%)	4 (80%)	--	--	5 (100%)	2 (9.5%)	3 (14.3%)	10 (47.6%)	--	6 (28.6%)	--	21 (100%)	--	3 (100%)	--	3 (100%)
Work-life interference	Problematic family life/functioning	--	--	1 (50%)	1 (50%)	--	2 (100%)	--	--	4 (80%)	1 (20%)	--	5 (100%)	2 (18.2%)	--	9 (81.8%)	--	10 (62.5%)	--	16 (100%)	--	--	--	--
	Effect on other personal functioning	--	--	--	--	--	--	--	--	1 (100%)	--	--	1 (100%)	--	--	4 (100%)	--	--	--	4 (100%)	2 (40%)	3 (60%)	--	5 (100%)
	Work-life interference (total)	--	--	1 (50%)	1 (50%)	2 (100%)	--	--	--	5 (83.3%)	1 (16.7%)	--	6 (100%)	3 (15%)	--	10 (50%)	--	20 (100%)	2 (40%)	3 (60%)	--	5 (100%)		
Available social support	Civilian support	--	--	--	--	--	--	--	--	3 (100%)	--	--	3 (100%)	--	--	3 (100%)	--	2 (40%)	--	5 (100%)	--	--	--	--
	General social support	--	1 (100%)	--	--	--	1 (100%)	--	1 (50%)	1 (50%)	--	--	2 (100%)	--	2 (33.3%)	4 (66.7%)	--	--	--	6 (100%)	--	--	--	--
	Supervisor/leadership support	--	--	--	--	--	--	--	--	3 (100%)	--	--	3 (100%)	--	--	3 (100%)	--	--	--	3 (100%)	--	3 (100%)	--	3 (100%)
	Team/colleague support	--	--	3 (100%)	--	--	3 (100%)	1 (16.7%)	--	5 (83.3%)	--	--	6 (100%)	1 (4.8%)	2 (9.5%)	14 (66.7%)	--	4 (19%)	--	21 (100%)	--	--	--	--
	Available social support (total)	--	1 (25%)	3 (75%)	--	--	4 (100%)	1 (7.1%)	1 (7.1%)	12 (85.7%)	--	--	14 (100%)	1 (2.9%)	4 (11.4%)	24 (68.6%)	--	6 (17.1%)	--	35 (100%)	--	3 (100%)	--	3 (100%)
Other coping resources	Communication with home front	--	--	--	--	--	--	--	--	1 (100%)	--	--	1 (100%)	--	--	2 (100%)	--	--	--	2 (100%)	--	--	--	--
	Dispositional resource	--	--	3 (100%)	--	--	3 (100%)	2 (22.2%)	--	6 (66.7%)	1 (11.1%)	--	9 (100%)	2 (12.5%)	3 (18.8%)	9 (56.3%)	--	--	--	16 (100%)	--	--	--	--
	Motivational	--	--	--	--	--	--	--	--	2 (100%)	--	--	2 (100%)	--	--	2 (66.7%)	--	1 (33.3%)	--	3 (100%)	--	1 (100%)	--	1 (100%)
	Adequate sleep	--	--	--	--	4 (100%)	4 (100%)	--	--	4 (50%)	4 (50%)	--	8 (100%)	--	--	3 (42.9%)	--	4 (57.1%)	--	7 (100%)	--	--	--	--
	Religion/Spirituality	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1 (100%)	--	--	--	1 (100%)	--	--	--	--
	Coping resources (total)	--	--	3 (42.9%)	--	4 (57.1%)	7 (100%)	--	2 (10%)	13 (65%)	5 (25%)	--	20 (100%)	2 (6.9%)	3 (10.3%)	17 (58.6%)	--	7 (24.1%)	--	29 (100%)	--	1 (100%)	--	1 (100%)
Interpersonal resources	Positive leadership perceptions	--	--	6 (85.7%)	--	1 (14.3%)	7 (100%)	--	--	12 (92.3%)	1 (7.7%)	--	13 (100%)	--	1 (5.6%)	12 (66.7%)	--	5 (27.8%)	--	18 (100%)	--	4 (80%)	1 (20%)	5 (100%)
	Team based resources	--	--	13 (86.7%)	--	2 (13.3%)	15 (100%)	--	--	24 (92.3%)	2 (7.7%)	--	26 (100%)	1 (2.7%)	1 (2.7%)	26 (70.3%)	--	9 (24.3%)	--	37 (100%)	--	2 (100%)	--	2 (100%)
	Interpersonal resources (total)	--	--	19 (86.4%)	--	3 (13.6%)	22 (100%)	--	--	36 (92.3%)	3 (7.7%)	--	39 (100%)	1 (1.8%)	2 (3.6%)	38 (69.1%)	--	14 (25.5%)	--	55 (100%)	--	6 (85.7%)	1 (14.3%)	7 (100%)
Job-design resources	Job-design resources (total)	--	--	4 (80%)	--	1 (20%)	5 (100%)	1 (14.3%)	--	4 (57.1%)	2 (28.6%)	--	7 (100%)	1 (6.7%)	--	4 (26.7%)	--	10 (66.7%)	--	15 (100%)	--	--	--	--
Organizational resources	Military support to family	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 (100%)	--	--	--	2 (100%)	--	--	--	--
	Organizational justice	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 (100%)	--	--	--	5 (100%)	--	--	--	--
	Organizational resources (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5 (71.4%)	--	2 (28.6%)	--	7 (100%)	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	--	--	1 (100%)	--	--	1 (100%)	1 (20%)	--	4 (80%)	--	--	5 (100%)	--	--	10 (90.9%)	--	1 (9.1%)	--	11 (100%)	--	--	--	--
	Positive deployment experiences	1 (50%)	--	1 (50%)	--	--	2 (100%)	1 (16.7%)	--	5 (83.3%)	--	--	6 (100%)	--	2 (18.2%)	8 (72.7%)	--	1 (9.1%)	--	11 (100%)	--	--	--	--
	Pride in team/military	1 (33.3%)	--	2 (66.7%)	--	--	3 (100%)	1 (100%)	--	--	--	--	1 (100%)	--	--	--	--	--	--	--	--	--	--	--
	Positive appraisal of deployment/service (total)	2 (33.3%)	--	4 (66.7%)	--	--	6 (100%)	3 (25%)	--	9 (75%)	--	--	12 (100%)	--	2 (9.1%)	18 (81.8%)	--	2 (9.1%)	--	22 (100%)	--	--	--	--
Self-regulatory strategies	Acceptance/emotion-focused	--	--	2 (100%)	--	--	2 (100%)	--	--	7 (100%)	--	--	7 (100%)	--	--	--	--	--	--	13 (100%)	--	--	--	--
	Avoidance coping	--	--	5 (100%)	--	--	5 (100%)	--	--	6 (100%)	--	--	6 (100%)	--	--	2 (100%)	--	--	--	2 (100%)	--	--	--	--
	Problem-focused/Approach coping	--	--	2 (100%)	--	--	2 (100%)	--	--	5 (100%)	--	--	5 (100%)	--	--	6 (100%)	--	--	--	6 (100%)	--	--	--	--
	Support seeking	--	--	1 (100%)	--	--	1 (100%)	--	--	1 (100%)	--	--	1 (100%)	--	--	--	--	--	--	--	--	--	--	--
	Various coping strategies/stress recovery activities	--	--	1 (100%)	--	--	1 (100%)	--	--	1 (100%)	--	--	1 (100%)	--	--	4 (100%)	--	--	--	4 (100%)	--	3 (100%)	--	3 (100%)
	Self-regulatory strategies (total)	--	--	11 (100%)	--	--	11 (100%)	--	--	20 (100%)	--	--	20 (100%)	--	--	25 (100%)	--	--	--	25 (100%)	--	3 (100%)	--	3 (100%)

		Psychological distress					Positive psychological functioning			Cognitive functioning				Performance	
		Original estimate					Original estimate			Original estimate				Original estimate	
		Beta estimate calculated	Beta estimate observed	Correlation	Odds ratio	Total	estimate calcul	Correlation	Total	a estimate calcula	Correlation	Standard mean difference	Total	Correlation	Total
First-order theme	**Second-order theme**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**	**#Effs (%)**
Demanding deployment/role features	Deployment characteristics	--	1 (3.4%)	28 (96.6%)	--	29 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	--	--
	Difficult living and working conditions	4 (25%)	1 (6.3%)	7 (43.8%)	4 (25%)	16 (100%)	4 (66.7%)	2 (33.3%)	6 (100%)	--	--	--	--	--	--
	Physical demands	--	--	1 (100%)	--	1 (100%)	--	--	--	--	3 (100%)	--	3 (100%)	--	--
	Violation of expectations	--	--	--	2 (100%)	2 (100%)	--	--	--	--	--	--	--	--	--
	Deployment/role features (total)	4 (8.3%)	1 (2.1%)	9 (18.8%)	34 (70.8%)	48 (100%)	4 (57.1%)	3 (42.9%)	7 (100%)	--	3 (100%)	--	3 (100%)	--	--
Dispositional vulnerabilities	Physiological biomarkers	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Trait vulnerability	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Dispositional vulnerabilities (total)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Interpersonal demands	General harassment	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Other interpersonal demands	--	--	--	12 (100%)	12 (100%)	--	--	--	--	--	--	--	--	--
	Sexual harassment	--	--	--	--	--	--	1 (100%)	1 (100%)	--	--	--	--	--	--
	Interpersonal demands (total)	--	--	--	12 (100%)	12 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	--	--
Moral challenge	Moral challenge unspecified	--	--	1 (50%)	1 (50%)	2 (100%)	--	--	--	--	--	--	--	--	--
	Transgression moral stressor	--	--	--	1 (100%)	1 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	--	--
	Witnessed moral stressor	--	1 (50%)	1 (50%)	--	2 (100%)	--	--	--	--	--	--	--	--	--
	Moral challenge (total)	--	1 (20%)	2 (40%)	2 (40%)	5 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	--	--
Negative affective states	Anger/Aggression	--	--	2 (100%)	--	2 (100%)	--	--	--	--	--	--	--	--	--
	Concerns/Worries	--	--	20 (90.9%)	2 (9.1%)	22 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	1 (100%)	1 (100%)
	Frustration	--	3 (100%)	--	--	3 (100%)	--	--	--	--	--	--	--	--	--
	Guilt/Shame	--	--	--	--	--	--	1 (100%)	1 (100%)	--	--	--	--	--	--
	Stress/Anxiety/Emotional tension/Fear	--	--	--	--	--	--	--	--	--	1 (100%)	--	1 (100%)	--	--
	Negative affective states (total)	--	3 (11.1%)	22 (81.5%)	2 (7.4%)	27 (100%)	--	2 (100%)	2 (100%)	--	1 (100%)	--	1 (100%)	1 (100%)	1 (100%)
	Other (than threat) negative appraisals	--	--	1 (100%)	--	1 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
Negative appraisals	Perceived threat	--	--	7 (53.8%)	6 (46.2%)	13 (100%)	--	2 (100%)	2 (100%)	--	--	--	--	--	--
	Negative appraisals (total)	--	--	8 (57.1%)	6 (42.9%)	14 (100%)	--	2 (100%)	2 (100%)	--	--	--	--	1 (100%)	1 (100%)
Potentially traumatic events	Combat exposure	1 (1.6%)	5 (8.1%)	23 (37.1%)	33 (53.2%)	62 (100%)	--	5 (100%)	5 (100%)	4 (20%)	1 (5%)	15 (75%)	20 (100%)	4 (100%)	4 (100%)
	Deployment-related trauma unspecified	--	1 (4.8%)	5 (23.8%)	15 (71.4%)	21 (100%)	--	--	--	--	--	--	--	--	--
	Interpersonal deployment trauma	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Witness/Vicarious exposure	--	--	10 (58.8%)	7 (41.2%)	17 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	--	--
	Potentially traumatic events (total)	1 (1%)	6 (6%)	38 (38%)	55 (55%)	100 (100%)	--	6 (100%)	6 (100%)	4 (20%)	1 (5%)	15 (75%)	20 (100%)	4 (100%)	4 (100%)
Professional difficulties/demands	Professional difficulties/demands (total)	--	--	5 (45.5%)	6 (54.5%)	11 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
Work-life interference	Problematic family life/functioning	--	--	2 (12.5%)	14 (87.5%)	16 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
	Effect on other personal functioning	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Work-life interference (total)	--	--	2 (12.5%)	14 (87.5%)	16 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
Available social support	Civilian support	--	--	1 (100%)	--	1 (100%)	--	--	--	--	--	--	--	--	--
	General social support	--	--	--	--	--	--	1 (100%)	1 (100%)	--	--	--	--	--	--
	Supervisor/leadership support	--	--	--	--	--	--	--	--	--	--	--	--	1 (100%)	1 (100%)
	Team/colleague support	--	--	2 (66.7%)	1 (33.3%)	3 (100%)	--	2 (100%)	2 (100%)	--	--	--	--	--	--
	Available social support (total)	--	--	3 (75%)	1 (25%)	4 (100%)	--	3 (100%)	3 (100%)	--	--	--	--	1 (100%)	1 (100%)
Other coping resources	Communication with home front	--	--	--	1 (100%)	1 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	1 (100%)	1 (100%)
	Dispositional resource	2 (20%)	4 (40%)	4 (40%)	--	10 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
	Motivational	--	1 (33.3%)	1 (33.3%)	1 (33.3%)	3 (100%)	--	--	--	--	--	--	--	--	--
	Adequate sleep	--	1 (25%)	3 (75%)	--	4 (100%)	--	--	--	--	--	--	--	--	--
	Religion/Spirituality	--	--	1 (100%)	--	1 (100%)	--	--	--	--	--	--	--	--	--
	Coping resources (total)	2 (10.5%)	6 (31.6%)	9 (47.4%)	2 (10.5%)	19 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	2 (100%)	2 (100%)
Interpersonal resources	Positive leadership perceptions	--	--	1 (12.5%)	7 (87.5%)	8 (100%)	--	--	--	--	--	--	--	--	--
	Team based resources	--	--	7 (38.9%)	11 (61.1%)	18 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
	Interpersonal resources (total)	--	--	8 (30.8%)	18 (69.2%)	26 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
Job-design resources	Job-design resources (total)	--	2 (18.2%)	3 (27.3%)	6 (54.5%)	11 (100%)	--	1 (100%)	1 (100%)	--	--	--	--	--	--
Organizational resources	Military support to family	--	--	--	2 (100%)	2 (100%)	--	--	--	--	--	--	--	--	--
	Organizational justice	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Organizational resources (total)	--	--	--	2 (100%)	2 (100%)	--	--	--	--	--	--	--	--	--
Positive appraisal of deployment/service	Meaning/Purpose	--	1 (33.3%)	2 (66.7%)	--	3 (100%)	--	--	--	--	--	--	--	--	--
	Positive deployment experiences	--	2 (40%)	1 (20%)	2 (40%)	5 (100%)	--	--	--	--	--	--	--	--	--
	Pride in team/military	--	1 (100%)	--	--	1 (100%)	--	--	--	--	--	--	--	--	--
	Positive appraisal of deployment/service (total)	--	4 (44.4%)	3 (33.3%)	2 (22.2%)	9 (100%)	--	--	--	--	--	--	--	--	--
Self-regulatory strategies	Acceptance/emotion-focused	--	--	9 (100%)	--	9 (100%)	--	--	--	--	--	--	--	--	--
	Avoidance coping	--	--	1 (100%)	--	1 (100%)	--	--	--	--	--	--	--	--	--
	Problem-focused/Approach coping	--	--	1 (100%)	--	1 (100%)	--	--	--	--	--	--	--	--	--
	Support seeking	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Various coping strategies/stress recovery activities	--	1 (50%)	1 (50%)	--	2 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)
	Self-regulatory strategies (total)	--	1 (7.7%)	12 (92.3%)	--	13 (100%)	--	--	--	--	--	--	--	1 (100%)	1 (100%)

eTable 10. Significant models of publication bias from trim and fill analysis.

			Statistics for trim and fill analysis			
Outcome	**Theme**	***z*-statistic (*p*-value)**	**Unadjusted estimate**	**Adjusted estimate**	**Unadjusted # estimates**	**# estimates added**
Anxiety	Coping resource (first-order)	4.422(<.001)	-0.540*	-0.585*	9	2
	Negative affective states (first-order)	2.995(.002)	0.260*	0.196*	24	6
	Self-regulatory strategies (first-order)	-3.891(<.001)	0.106*	0.161*	12	1
	Concerns/worries (second-order)	3.794(<.001)	0.295*	0.265*	15	3
	Deployment-related trauma unspecified (second-order)	-5.702 (<.001)	0.380*	0.450*	7	1
Burnout	Demanding deployment/role features (first-order)	-2.836(.004)	0.124*	0.124*	10	0
Depression	Coping resource (first-order)	4.012(<.001)	-0.396*	-0.539*	27	7
	Negative affective states (first-order)	3.295(<.001)	0.293*	0.205*	56	16
	Acceptance/emotion-focused (second-order)	2.296(.021)	-0.052	-0.082	8	1
	Deployment characteristics (second-order)	-2.196(.028)	0.049*	0.049*	9	0
	Deployment-related trauma unspecified (second-order)	-3.924(<.001)	0.324*	0.464*	7	2
	Positive leadership perceptions (second-order)	-2.687(.007)	-0.231*	-0.163*	19	6
	Adequate sleep (second-order)	3.652 (<.001)	-0.532*	-0.561*	9	1
Psych distress	Demanding deployment/role features (first-order)	4.788(<.001)	0.114*	0.039*	65	17
	Job-design resources (first-order)	**-2.948(.003)**	**-0.128***	**0.033**	**16**	**5**
	Negative affective states (first-order)	4.481(<.001)	0.216*	0.107*	37	10
	Positive appraisal of deployment/service (first-order)	**-3.099(.001)**	**-0.179***	**-0.070**	**13**	**4**
	Combat exposure (second-order)	2.055(.039)	0.170*	0.034*	92	30
	Concerns/worries (second-order)	3.890(<.001)	0.256*	0.132*	31	9
	Difficult living and working conditions (second-order)	2.295(.021)	0.216*	0.089*	23	7
	Witness/vicarious exposure (second-order)	2.501(.012)	0.152*	0.129*	21	4
PTSD	Moral challenge (first-order)	2.457(.014)	0.250*	0.164*	45	14
	Organisational-resources (first-order)	6.348(<.001)	-0.195*	-0.270*	10	3

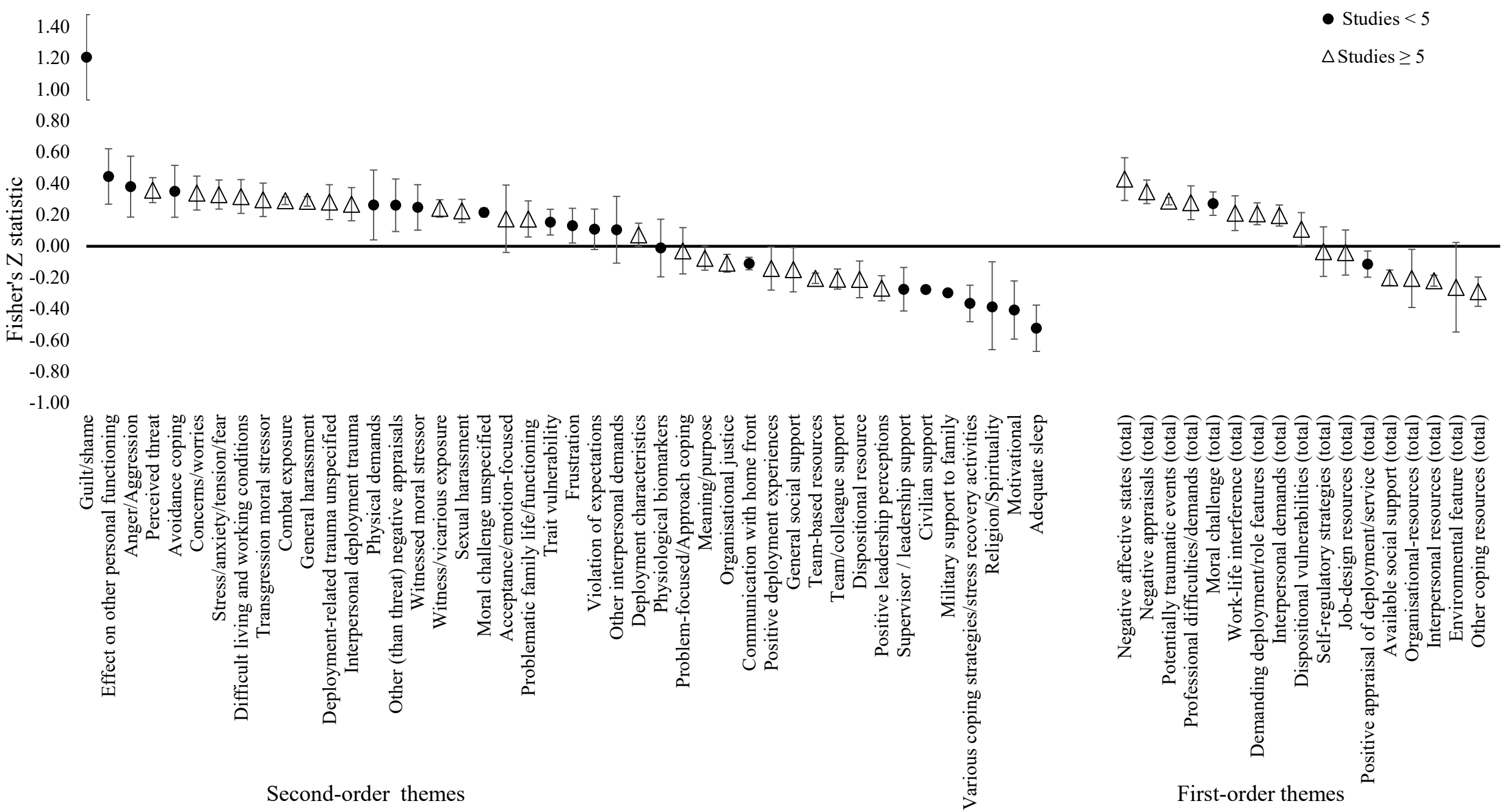
Demanding deployment/role features (first-order)	2.485(.012)	0.166*	0.107*	65	9
Positive appraisal of deployment/service (first-order)	-2.214 (.026)	-0.135*	-0.103*	25	3
Potentially traumatic events (first-order)	4.082(<.001)	0.260*	0.088*	641	195
Professional difficulties/demands (first-order)	2.109(.034)	0.214*	0.091*	29	8
Combat exposure (second-order)	3.113(.001)	0.270*	0.092*	491	152
Deployment characteristics (second-order)	-2.624(.008)	0.091*	0.113*	34	4
Meaning/purpose (second-order)	**-2.347(.018)**	**-0.097***	**-0.048**	**14**	**3**
Adequate sleep (second-order)	2.834(.004)	-0.600*	-0.621*	9	2
Witness/vicarious exposure (second-order)	2.124(.033)	0.211*	0.087*	93	26
Witnessed moral stressor (second-order)	2.540(.011)	0.226*	0.170*	17	5

*denotes statistical significance of adjusted and unadjusted estimates.
Bolded estimates are those that became non-significant after adjusted for publication bias.

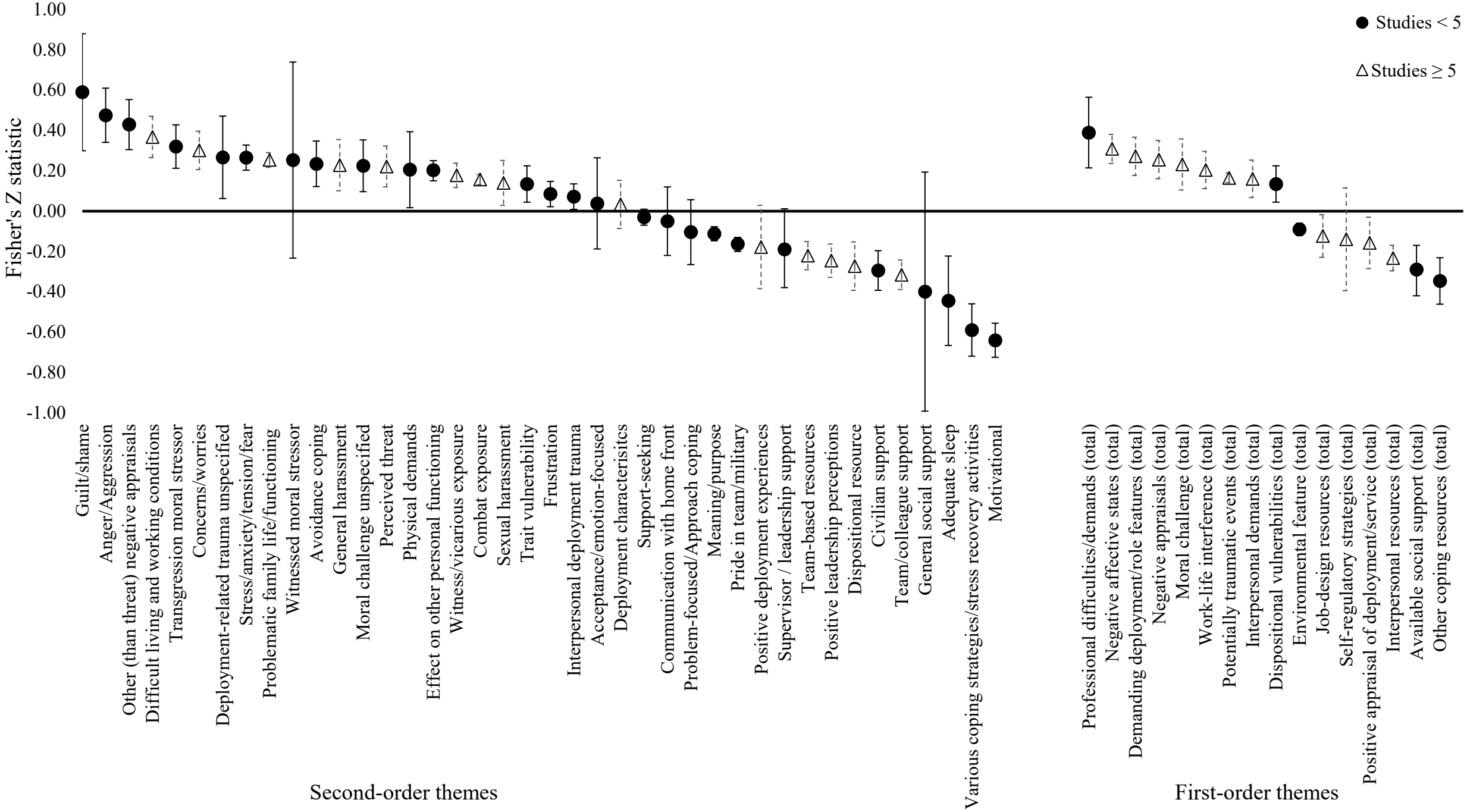
eTable 11. Comparison of meta-estimates from comparable prior meta-analyses

Year	Citation	Participants	Relationship under exploration	Outcome	Effect size from study	Conversion to Fisher's Z	Comparison to our effect size	Conclusion
2021	Blais, R. K., et al., (2021). Self-reported PTSD symptoms and social support in US military service members and veterans: A meta-analysis. *European Journal of Psycho-traumatology, 12*(1), https://doi.org/10.1080/20008198.2020.1851078	The population consisted of military service members or veterans in the U.S. military over the age of 18 who were exposed to trauma or deployed to a combat zone.	Relationship between social support and PTSD severity. Assessment of broad social support (e.g., military and non-military sources; deployment support and non-deployment support)	PTSD symptoms assessed with validated scale within <1 month from traumatic event	R= -.33	Z= -.34	Comparative effect size relating to available social support on PTSD; Z= -.20 (-0.25 to -0.15)	Our effect size is lower than that attained by Blais et al. (2021) and this may because the assessment of PTSD by Blais et al was <1 month. The current domain analysis included studies over a longer time period since the traumatic event likely resulting in symptom attrition.
2018	Bøg M, Filges T, & Jørgensen A.M.K. (2018) Deployment of personnel to military operations: impact on mental health and social functioning. *Campbell Systematic Reviews*, 6 DOI: https://doi.org/10.4073/csr.2018.6	The populations that were eligible were military personnel, from any nation, who had experienced deployment to international military operations since 1989.	Relationship between combat exposure (high vs low) on PTSD	PTSD symptoms assessed with validated scale within 0-6 months post-deployment and 24 + months post-deployment	OR = 2.74 (0-6 months post-deployment) OR = 2.09 (24 + months post-deployment)	For 0-6 months (Z= .27) For 24 + months (Z= .20)	Comparative effect size relating to combat exposure; Z= 0.29 (0.27 to 0.31) at 0-6 months but greater than the estimate for when PTSD was 24 + months.	Our effect size for combat exposure on PTSD was generally comparable to that previously attained by Bøg et al., (2018), particularly for studies assessing PTSD at 0-6 months. At 24+ months post-deployment the observed effect was lower in the previous study.
As above	As above		Relationship between combat exposure (high vs low) on Depression	Depression symptoms assessed with validated scale within 0-6 months post-deployment and 24 + months post-deployment	OR = 2.00 (0-6 months post-deployment) OR = 2.09 (24 + months post-deployment)	For 0-6 months (Z= .19) For 24 + months (Z= .16)	Comparative effect size relating to combat exposure comparable irrespective of time point of depression measurement; Z= 0.16 (0.13 to 0.18).	The meta-estimate observed in this meta-analysis was comparable to that found by Bøg et al., (2018).

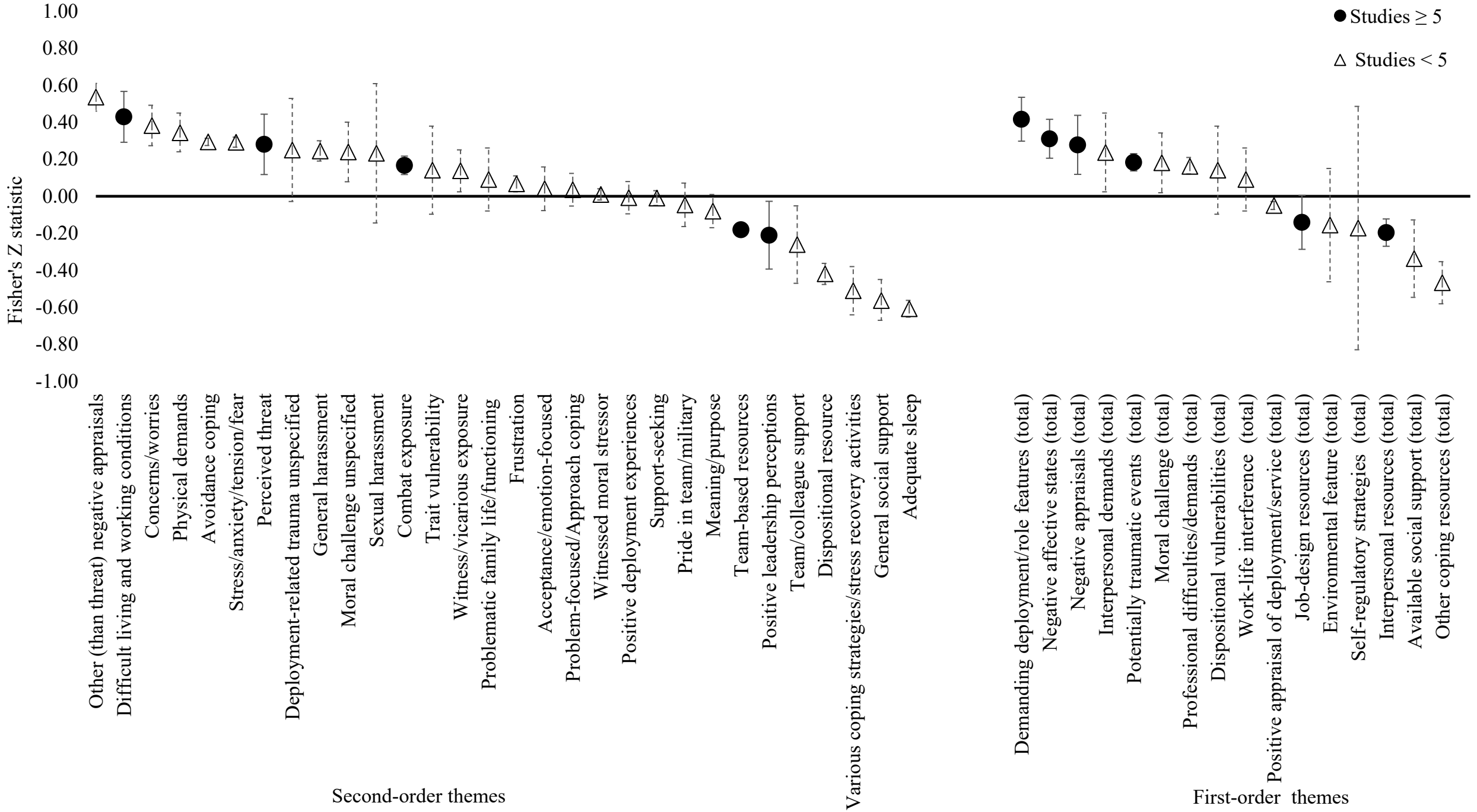
2015	Xue, C., Ge, Y., Tang, B., Liu, Y., Kang, P., Wang, M., & Zhang, L. (2015). A meta-analysis of risk factors for combat-related PTSD among military personnel and veterans. PloS one, 10(3), e0120270.	Previously deployed active and veteran military personnel	Combat exposure on PTSD	PTSD assessed on the basis DSM-IV-TR criteria. Individuals meeting full diagnostic criteria and those with less severe post-traumatic symptoms or partial PTSD of the categorical measure of PTSD after one month post exposure.	OR = 2.10	Z= .20	Comparative effect size relating to combat exposure comparable irrespective of time point of depression measurement; Z= 0.16 (0.13 to 0.18).	The meta-estimate observed in this domain analysis was lower, albeit comparable to that found by Xue et al., (2015).
As above	As above	As above	Witnessed someone wounded/killed on PTSD	As above	OR = 3.12	Z= .31	The comparative effect in our study included all types of vicarious traumatic events on PTSD; Z= 0.24 (0.19 to 0.30)	The meta-estimate observed in this domain analysis was lower, albeit comparable to that found by Xue et al., (2015). Differences observed may be related to the breadth of our vicarious traumatic events that were included (e.g., Aftermath of battle, observed destruction)
As above	As above	As above	Deployment-related stressors on PTSD	As above	OR = 2.69	Z= .27	The most comparative effect in our study was the combined effects of demanding deployment/role features on PTSD Z= 0.21; (0.14 to 0.28)	The meta-estimate observed in this domain analysis was lower, albeit comparable to that found by Xue et al., (2015).
As above	As above	As above	Unit support on PTSD	As above	OR = 0.59	Z= -.15	The most comparative effect in our study was the team/colleague support on PTSD; Z = -0.21 (-0.27 to -0.15)	The meta-estimate observed in this domain analysis was greater, albeit comparable to that found by Xue et al., (2015).



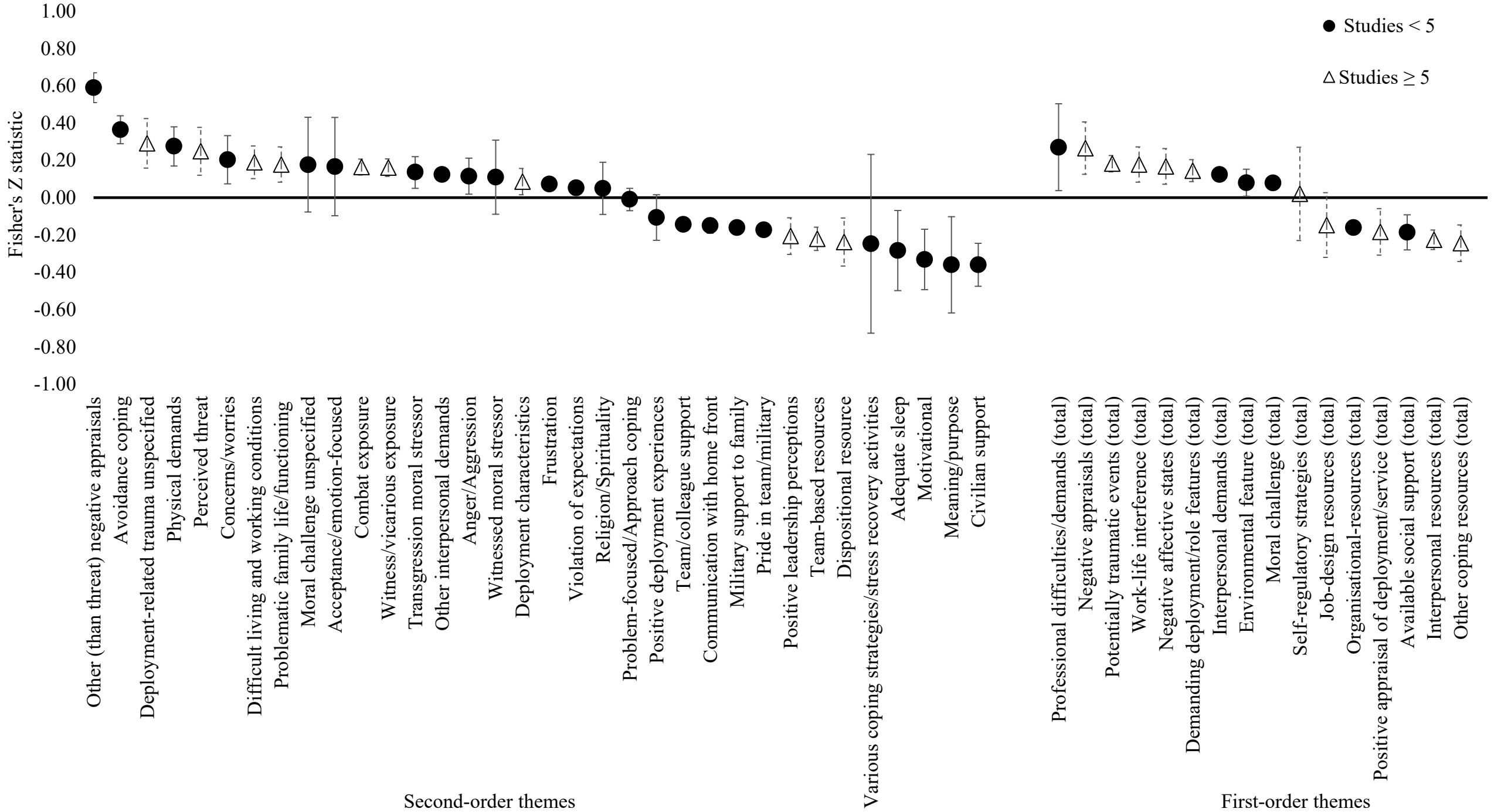
eFigure 1: Fisher's Z meta-statistic for first and second-order themes correlated with PTSD



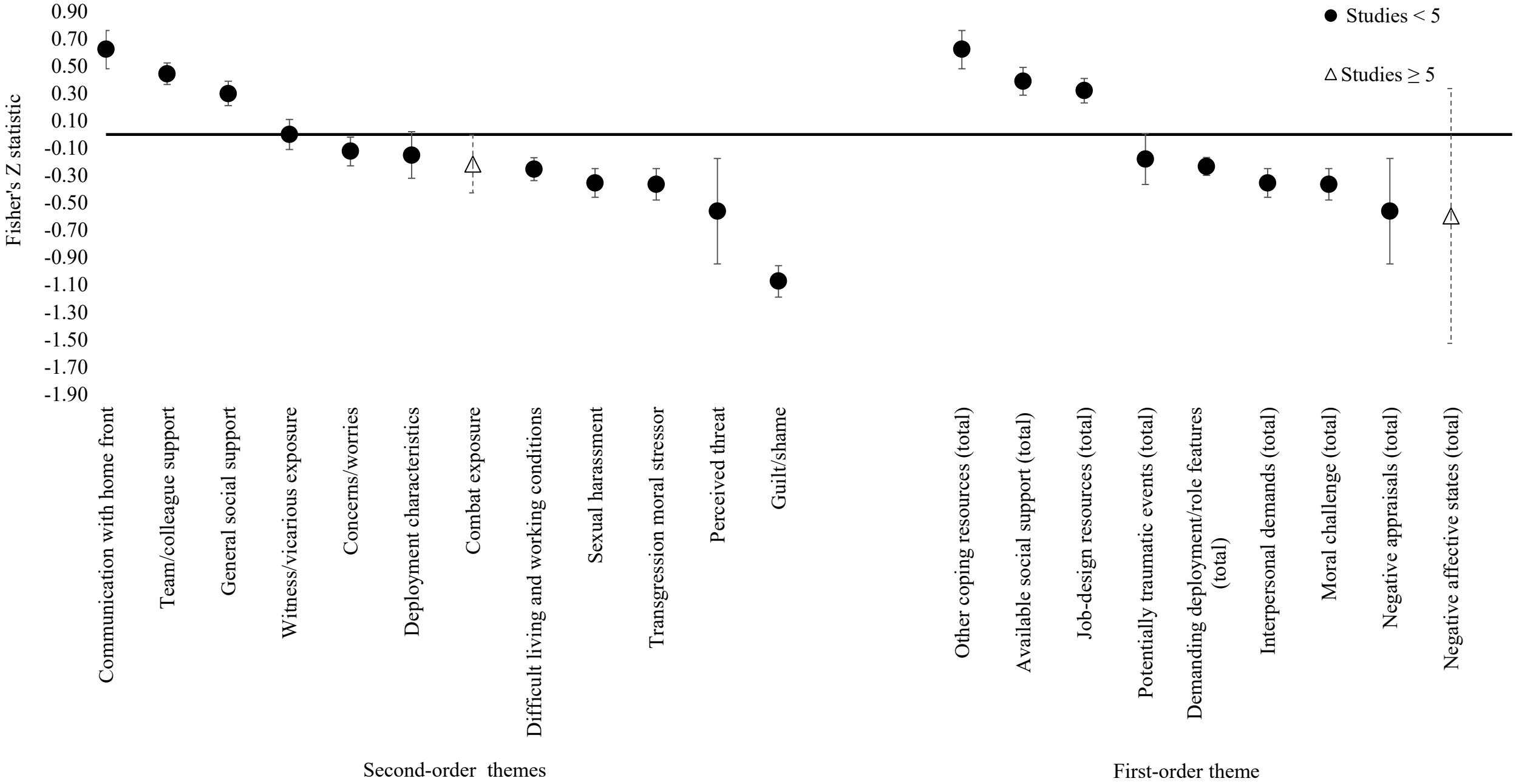
eFigure 2: Fisher's Z meta-statistic with 95% CI for first and second-order themes correlated with depression



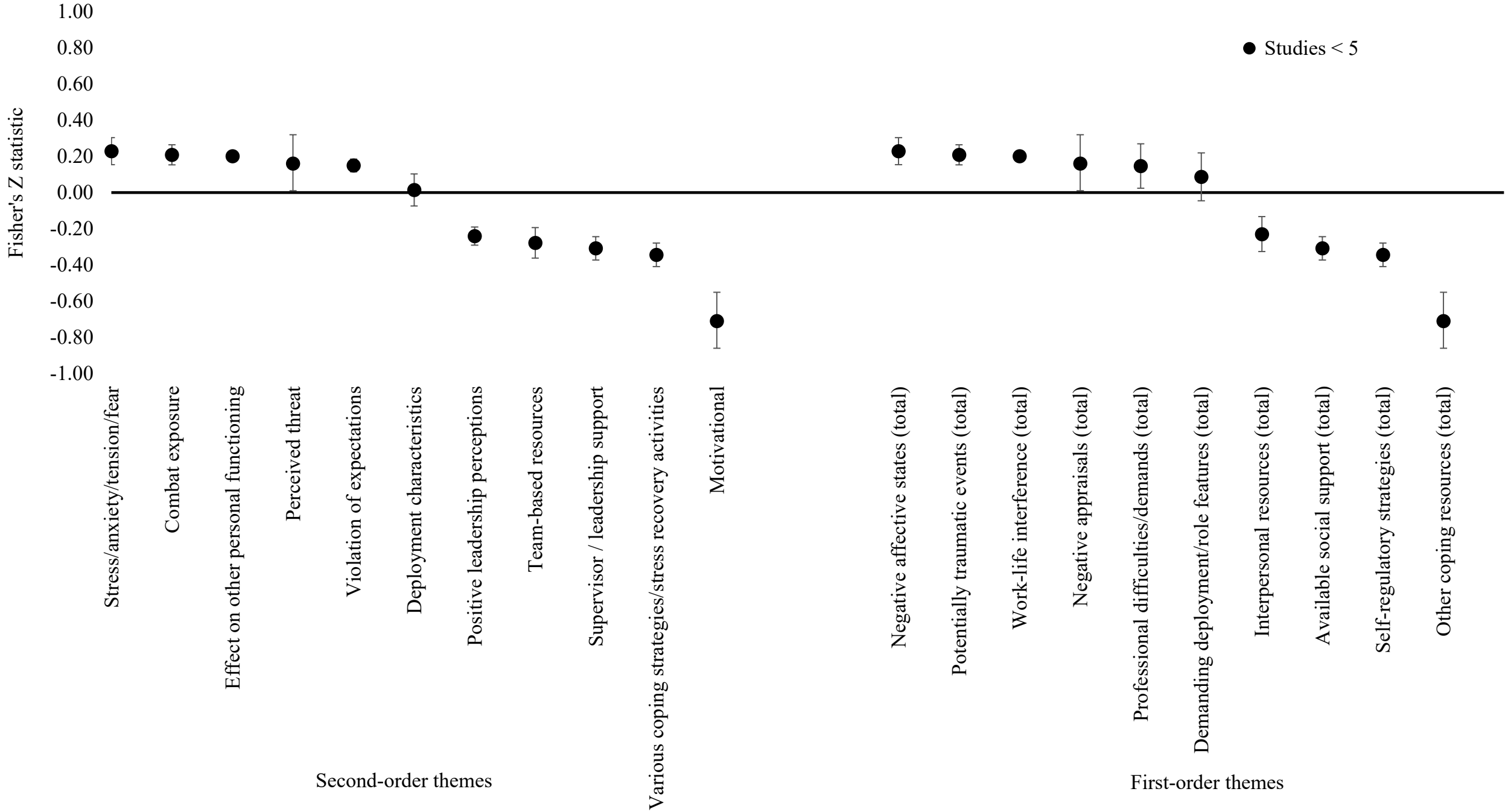
eFigure 3: Fisher's Z meta-statistic and 95% CI for the first and second-order themes correlated with anxiety



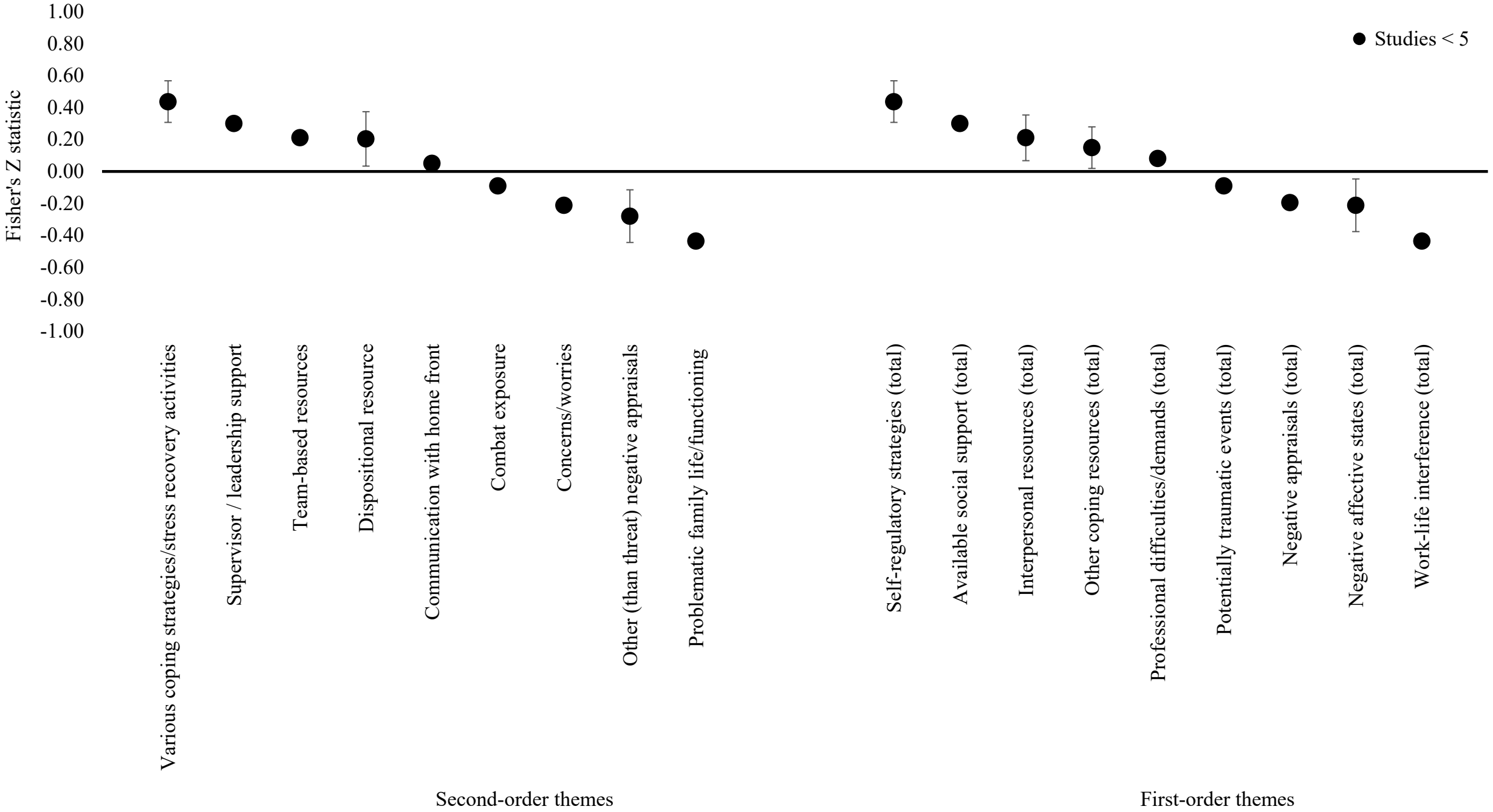
eFigure 4: Fisher's Z meta-statistic with 95% CI for first and second-order themes correlated with psychological distress



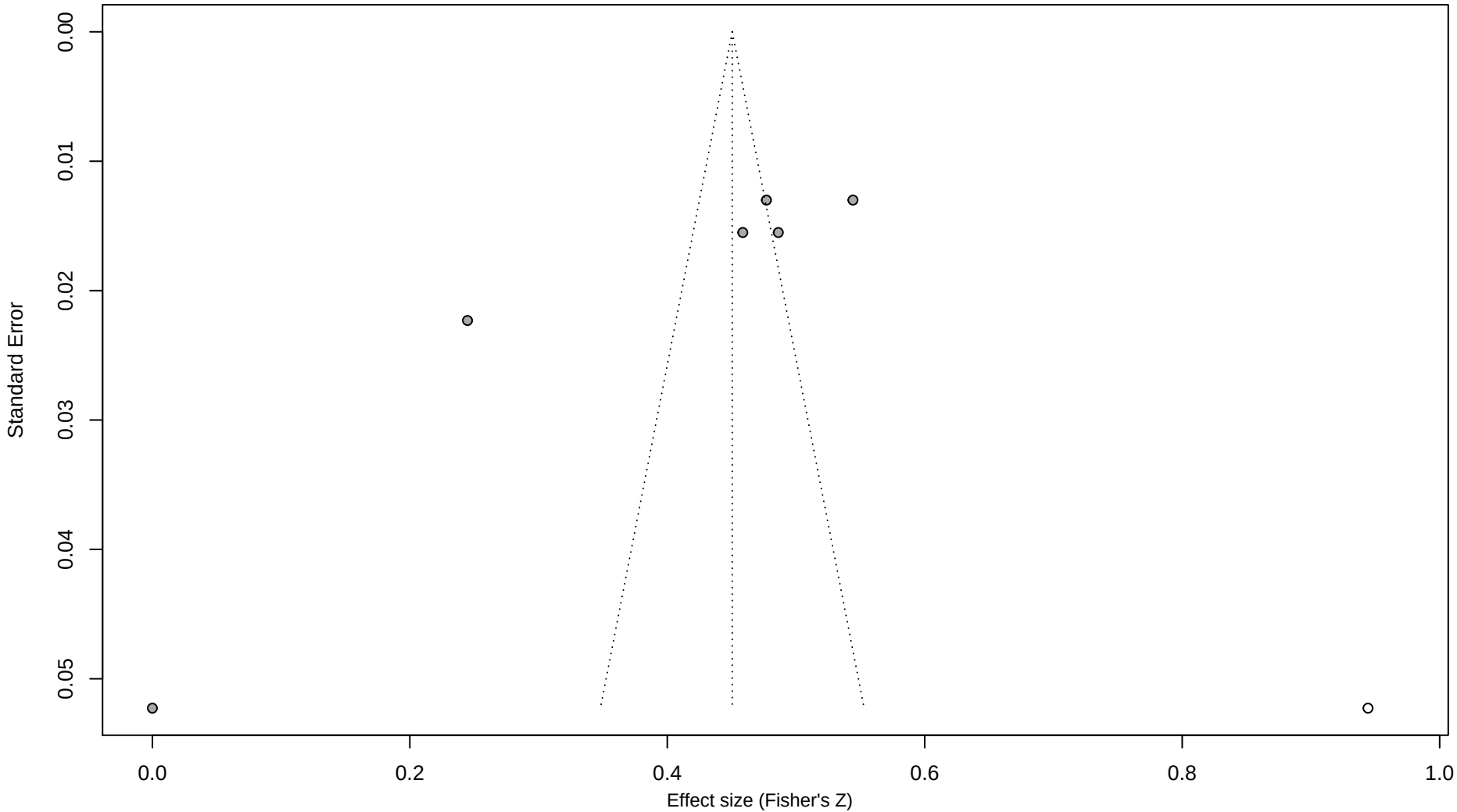
eFigure 5: Fisher's Z meta-statistic with 95% CI for the first and second-order themes correlated with positive psychological functioning



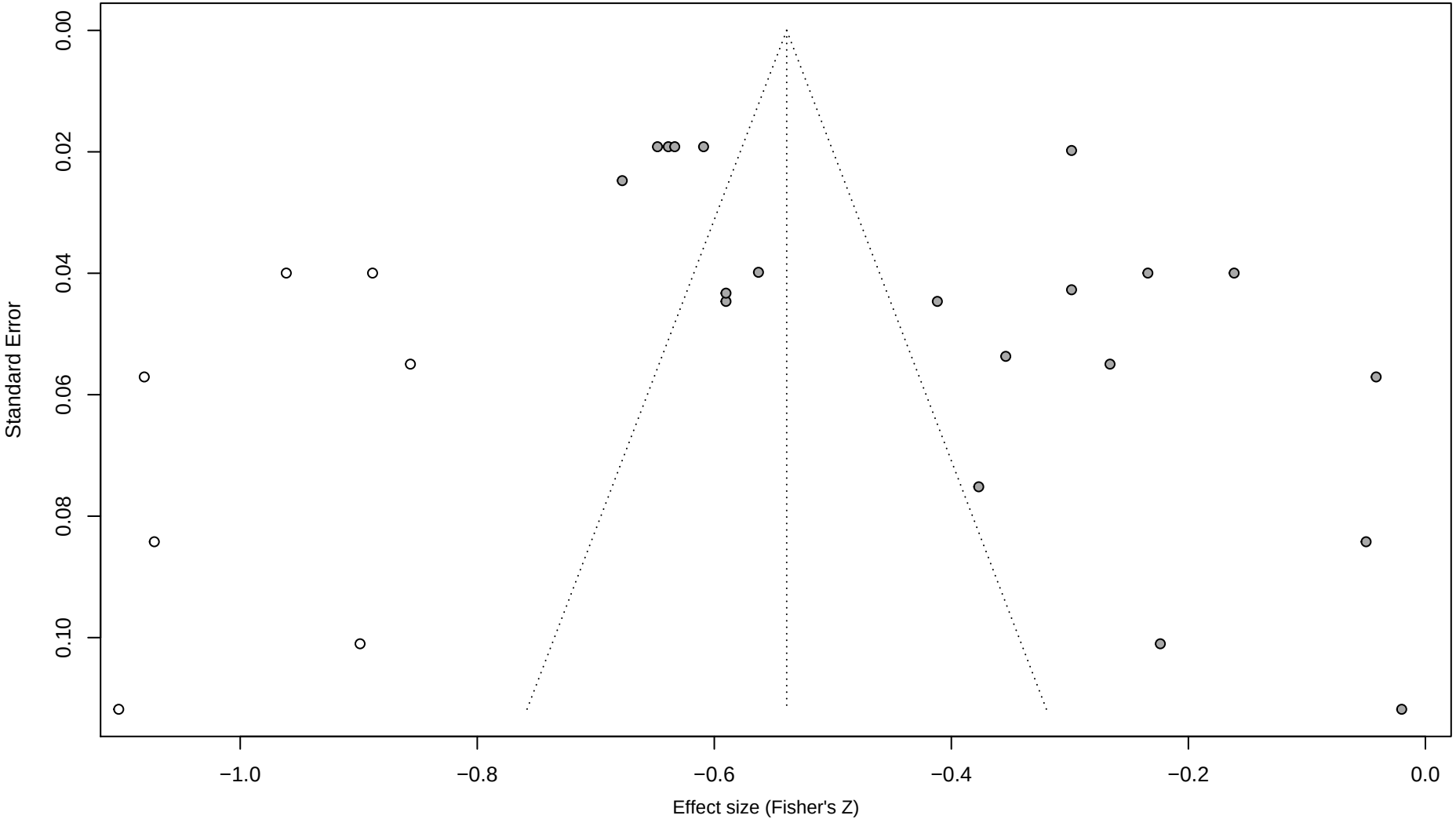
eFigure 6: Fisher's Z meta-statistic with 95% CI for first and second-order themes correlated with burnout



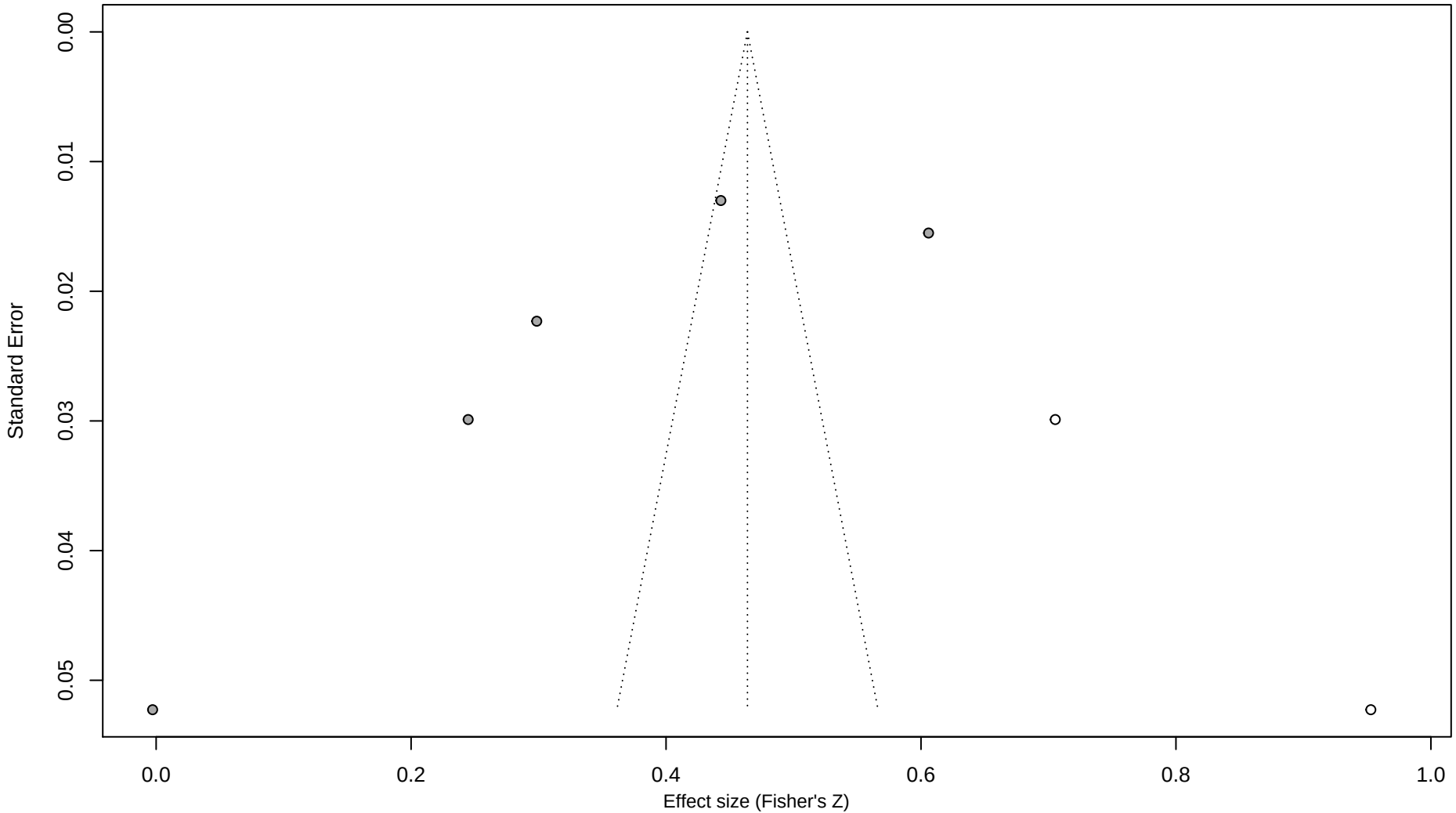
eFigure 7: Fisher's Z meta-statistic with 95% CI for the first and second-order themes correlated with job performance



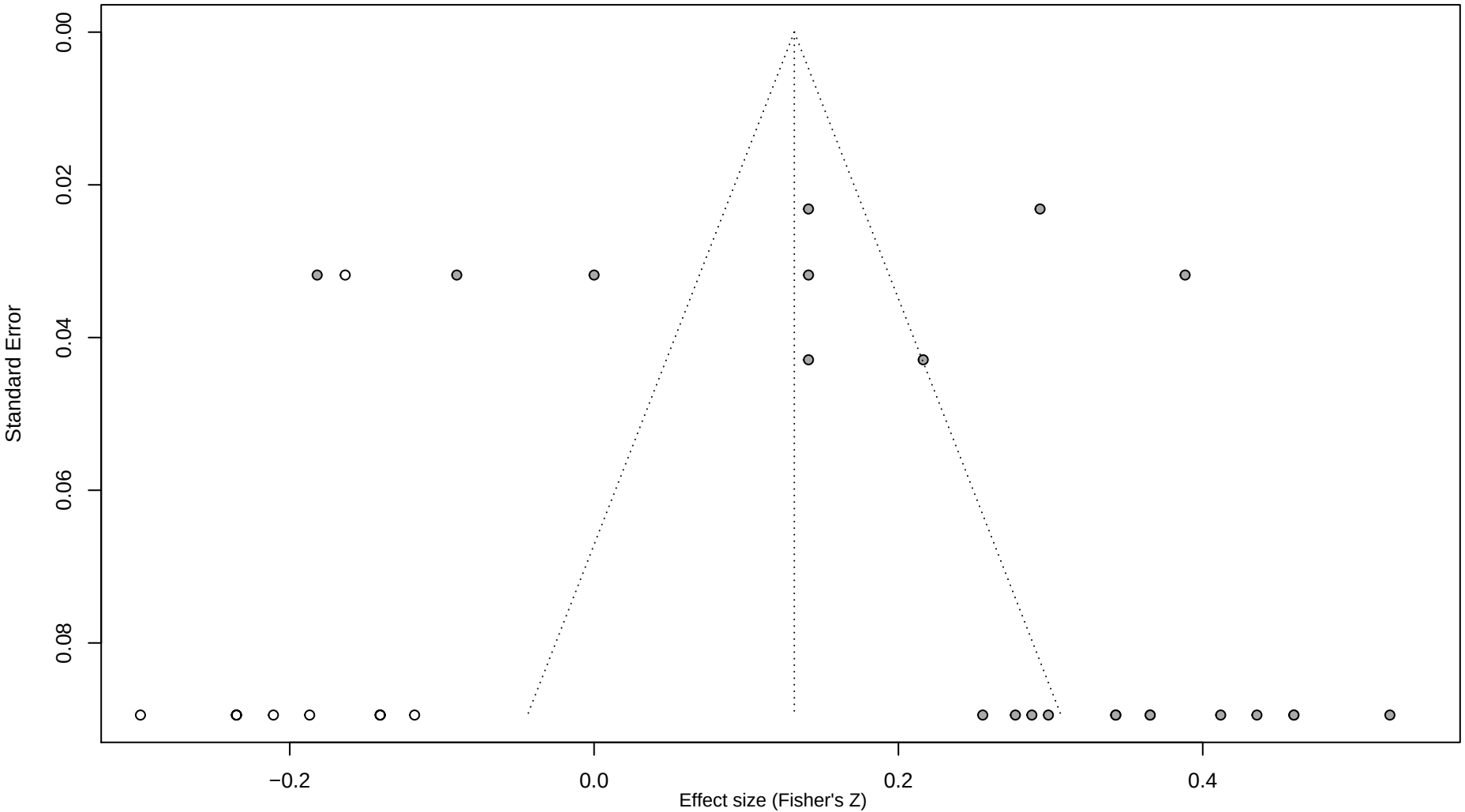
eFigure 8: Funnel plot for deployment related trauma on anxiety. Filled dots are individual effect sizes and unfilled dots are added estimates plotted as a function of standard error and including region of significance p<.05. The vertical line represents the adjusted model estimate (Fisher's z=0.45).



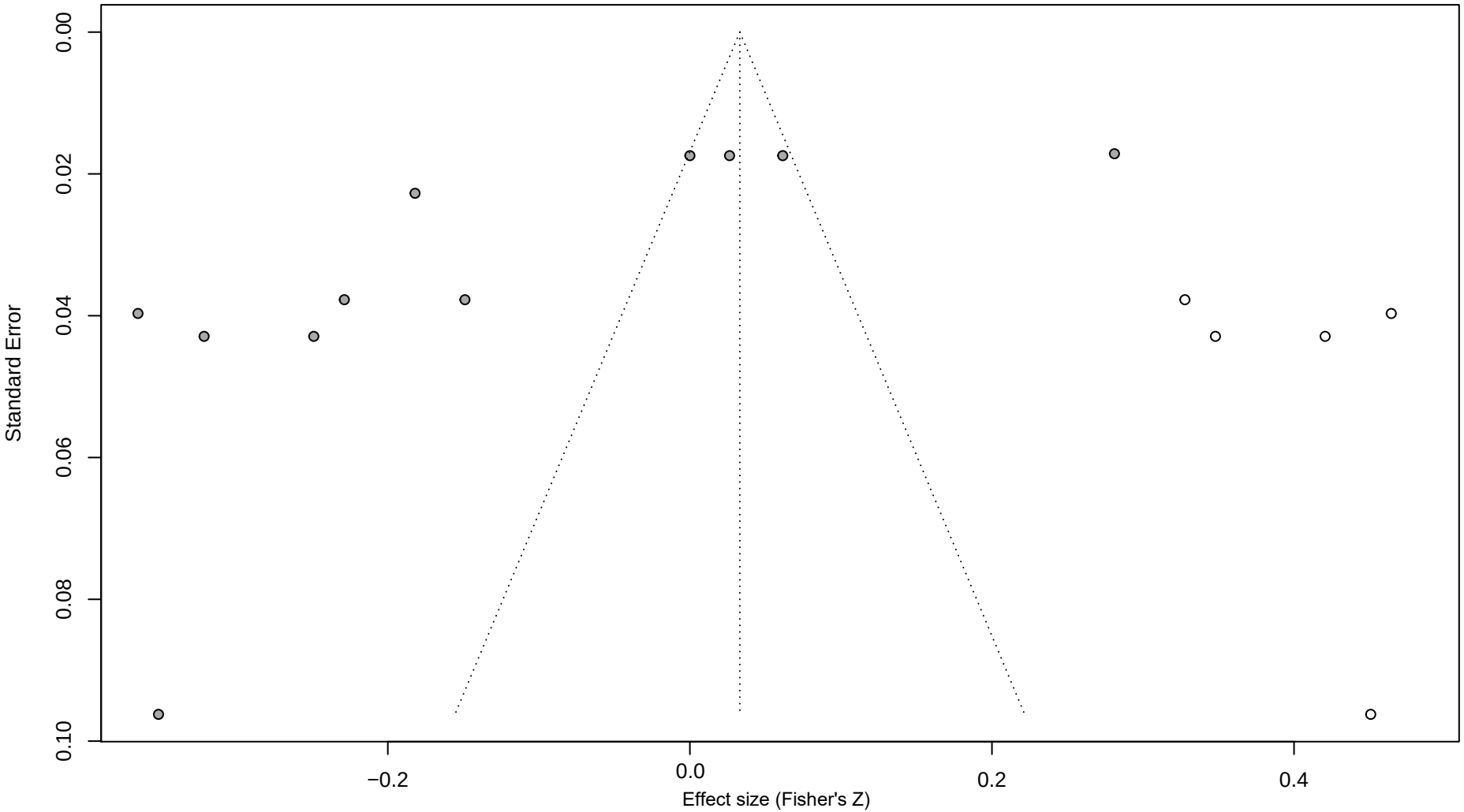
eFigure 9: Funnel plot for coping resources on depression. Filled dots are individual effect sizes and unfilled dots are added estimates plotted as a function of standard error and including region of significance p<.05. The vertical line represents the adjusted model estimate (Fisher's z=-0.54).



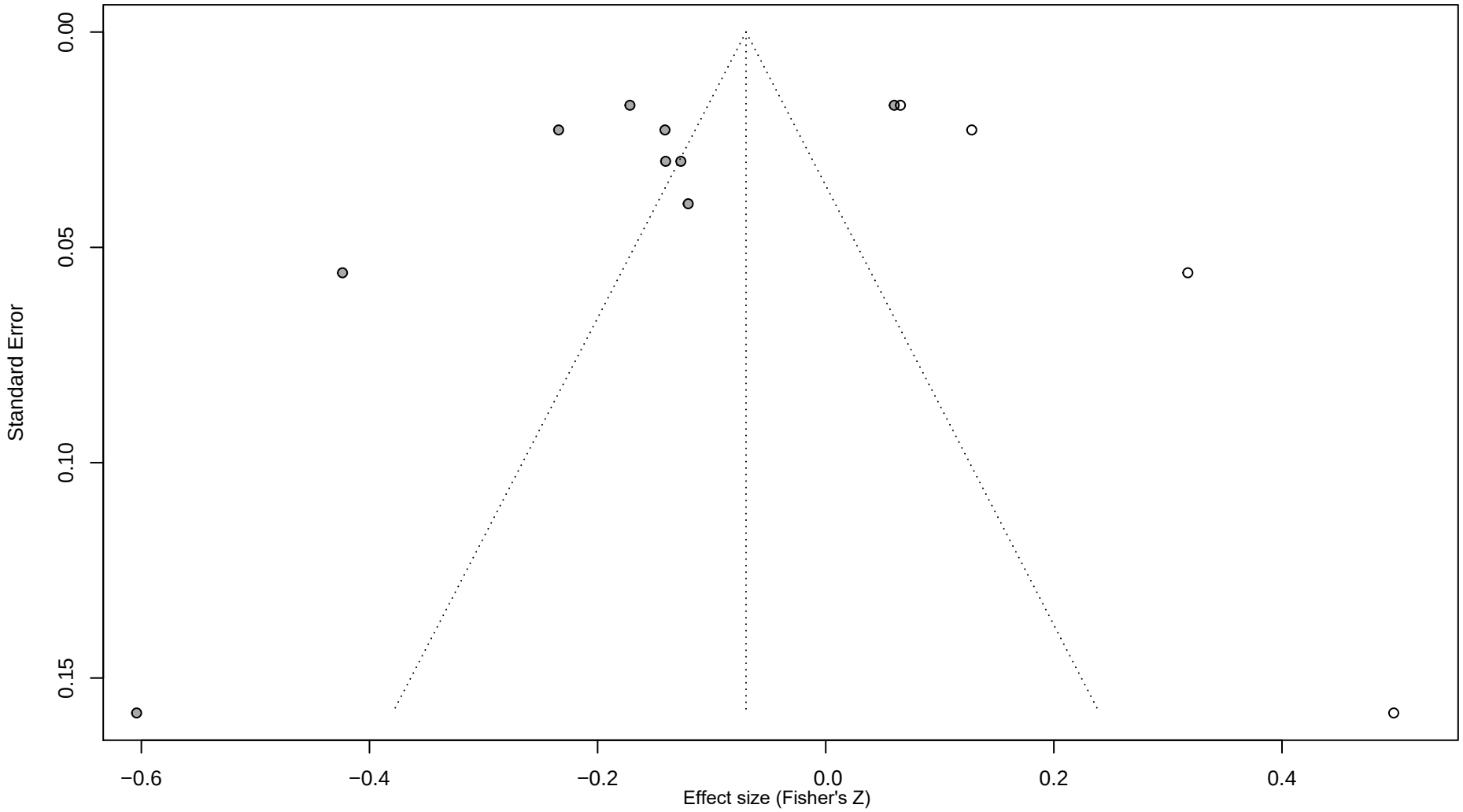
eFigure 10: Funnel plot for deployment related trauma on depression. Filled dots are individual effect sizes and unfilled dots are added estimates plotted as a function of standard error and including region of significance p<.05. The vertical line represents the adjusted model estimate (Fisher's z=0.46).



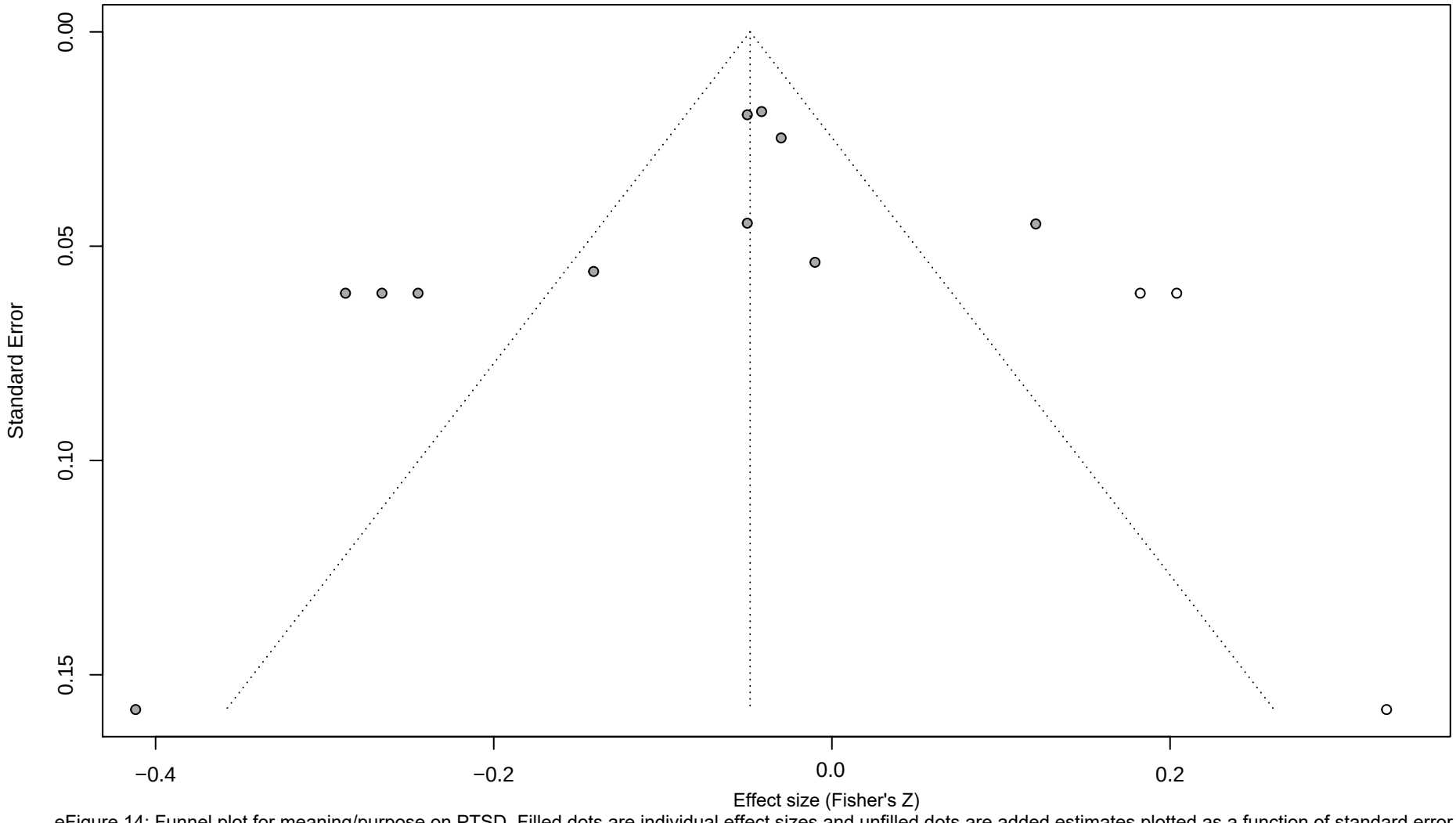
eFigure 11: Funnel plot for concerns and worries on psych distress. Filled dots are individual effect sizes and unfilled dots are added estimates plotted as a function of standard error and including region of significance p<.05. The vertical line represents the adjusted model estimate (Fisher's z=0.13).



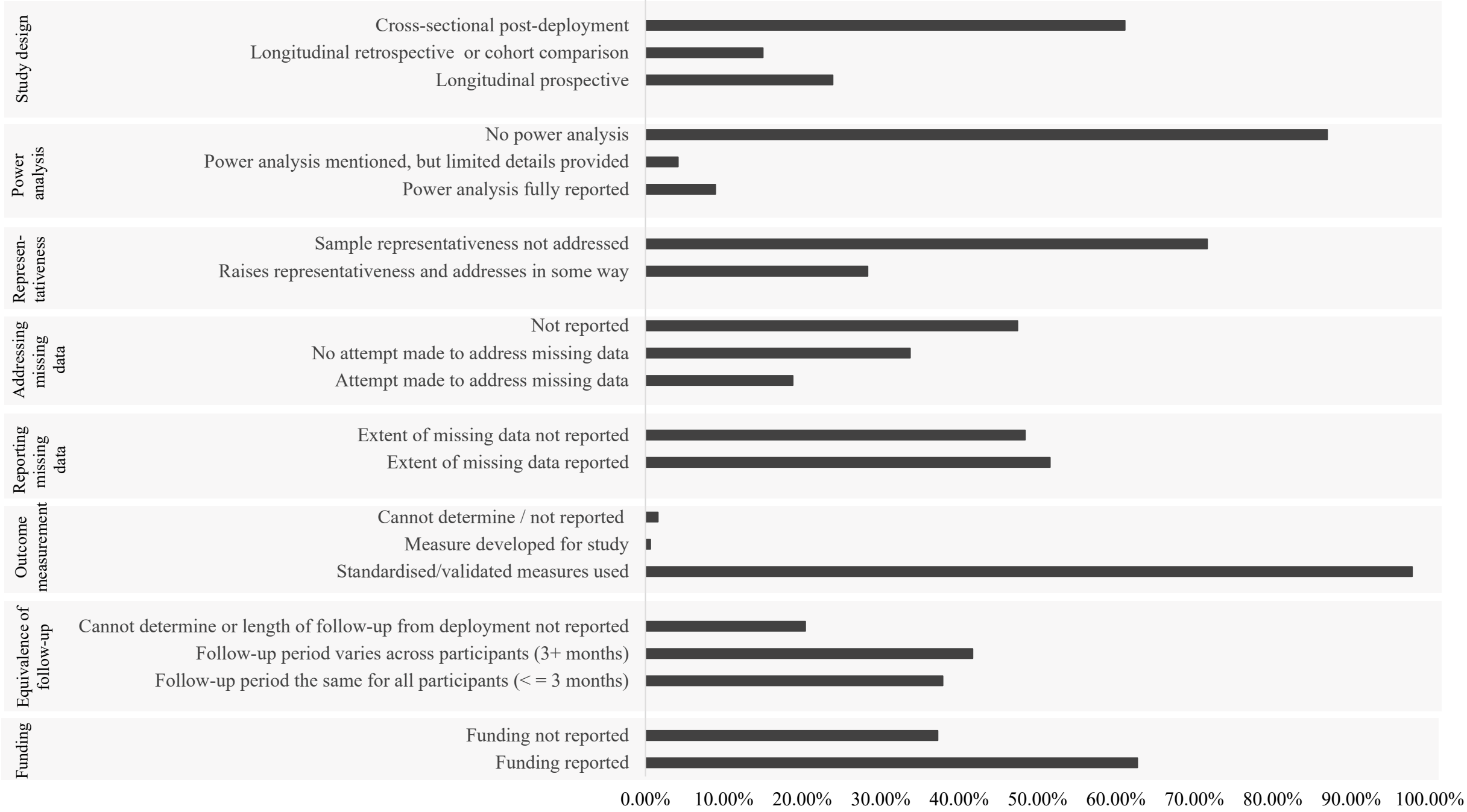
eFigure 12: Funnel plot for job-design resources on psych distress. Filled dots are individual effect sizes and unfilled dots are added estimates plotted as a function of standard error and including region of significance p<.05. The vertical line represents the adjusted model estimate (Fisher's z=0.03).



eFigure 13: Funnel plot for positive appraisal on psych distress. Filled dots are individual effect sizes and unfilled dots are added estimates plotted as a function of standard error and including region of significance p<.05. The vertical line represents the adjusted model estimate (Fisher's z=-0.07).



eFigure 14: Funnel plot for meaning/purpose on PTSD. Filled dots are individual effect sizes and unfilled dots are added estimates plotted as a function of standard error and including region of significance p<.05. The vertical line represents the adjusted model estimate (Fisher's z=-0.048).



eFigure 15: Summary of the design weaknesses and risks of bias across the domain

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