**Submission to the Commissioner of the Royal Commission into Domestic, Family, and Sexual Violence**

**Re: Intimate Partner Violence (IPV) Among Australian Defence Force (ADF) Personnel and Veterans**

**Submitted by Hayley Boswell- CEO and Founder , Defence Kidz.**

Intimate Partner Violence (IPV) represents a significant public health issue in Australia and raises serious concerns for current and former Australian Defence Force (ADF) personnel and their families. IPV encompasses any behaviour within a current or previous intimate relationship that results in physical, psychological, or sexual harm. This includes acts of physical and sexual violence, as well as emotional or psychological abuse, such as coercive control, which aims to dominate and restrict the autonomy of victims.

A comprehensive study conducted in 2015, as part of the Transition and Wellbeing Research Programme, provided valuable insights into the health and wellbeing impacts of military service on both currently serving and recently transitioned ADF personnel and their families. This large-scale survey gathered data from both transitioned personnel—those who had left active military service within the previous five years—and their intimate partners. The programme's findings represent the most in-depth research to date on the effect of military service on the mental, physical, and social health of these populations.

The data indicated significant levels of IPV exposure among both current and transitioned ADF personnel and their partners, with transitioned personnel reporting higher levels of IPV than their currently serving counterparts. Emotional abuse emerged as the most prevalent form of violence reported, followed by physical and sexual violence.

**Key Findings:**

1. **Prevalence of IPV:**

   - 28.9% of transitioned ADF personnel and 22.5% of current ADF personnel reported exposure to IPV.
   - Among intimate partners, 45.5% of partners of transitioned personnel and 24.1% of partners of current personnel reported IPV exposure.

2. **Types of IPV:**

- Emotional abuse was the most common form of IPV, with 26.6% of transitioned personnel and 20.8% of current personnel reporting exposure.
- Physical violence affected 9.7% of transitioned personnel and 6.0% of current personnel.
- Among partners, 43.6% of partners of transitioned personnel and 22.8% of partners of current personnel reported emotional abuse, while physical violence was reported by 9.1% and 2.4%, respectively.

3. **Mental Health Implications:**

- IPV exposure was strongly associated with mental health issues such as probable Post-Traumatic Stress Disorder (PTSD), depression, and suicidal ideation.
- Transitioned personnel who reported IPV exposure demonstrated higher rates of harmful alcohol consumption, suicidal thoughts, and mental health service utilisation. Over 90% of these individuals had visited a health provider in the past year.

**Policy Implications:**

The findings from this research highlight the urgent need for targeted interventions and policies to address IPV among both current and former ADF personnel and their families. There is a clear need for comprehensive strategies that encompass both mainstream and veteran-specific health services, focusing on the recognition and response to emotional abuse, the most prevalent form of IPV. This is especially critical given the significant mental health burdens associated with IPV exposure.

**Recommendations:**

1. **National Action Plan Alignment:**

- Develop a specific action plan addressing IPV within military and veteran families, aligning with the National Plan to End Violence Against Women and Children 2022-2032.

2. **Enhanced IPV Support Services:**

- Strengthen programs aimed at addressing emotional and physical IPV in both general healthcare settings and veteran-specific services. Ensure health providers in these settings are equipped to recognise and respond to IPV.

3. **Prevention Programs:**

- Implement prevention programs within the ADF to address cultural and environmental factors that may contribute to IPV among military personnel. These programs should focus on education, early intervention, and providing support services during the transition from military to civilian life.

4. **Veteran Support Systems:**

- Improve support state mechanisms for veterans and their families through targeted financial, social, and mental health services, including ex-service organisations that can play a crucial role in identifying and responding to IPV.

Addressing IPV among ADF personnel and their families is critical not only for the health and safety of individuals but also for the well-being of the broader military community. By implementing these recommendations, we can work towards reducing the prevalence of IPV and supporting those affected by it.

To read more about the "Intimate Partner Violence among current and ex-serving Australian Defence Force personnel and families Transition and Wellbeing Research Programme Data Analyses Project 2023" go to :

https://www.dva.gov.au/sites/default/files/2023-11/ipv-research.pdf

Sincerely,

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# Intimate Partner Violence among current and ex-serving Australian Defence Force personnel and families

## Transition and Wellbeing Research Programme Data Analyses Project

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- E014/018 – Transition and Wellbeing Research Programme: The Wellbeing Study
- E014/017 – Transition and Wellbeing Research Programme: The Impact of Combat Study
- E014/019 – Transition and Wellbeing Research Programme: The Family Wellbeing Study

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# Executive Summary

## Background and Aims

Intimate partner violence (IPV) is a major public health issue in Australia, while international studies indicate that both exposure and use of IPV may be common within families of current and ex-serving[1] personnel. As there have been no relevant studies of military or veteran-specific samples from Australia, the aims of this project were to:

1. Examine rates of IPV exposure reported among recently transitioned ADF members and how these compare to rates reported by current personnel.
2. Examine rates of IPV exposure as reported by partners of recently transitioned and current serving ADF members.
3. Explore risk and protective factors for self-reported IPV exposure.
4. Examine mental health, psychosocial and physical health correlates of IPV exposure, alone and when considered in addition to other forms of military and non-military trauma.
5. Describe the help-seeking behaviours and patterns of transitioned veterans and partners who reported exposure to IPV.
6. Describe patterns of co-occurring IPV use (as reported by intimate partners) among transitioned veterans and their partners.
7. Explore veteran-related risk and protective factors for presumed IPV use among transitioned ADF members.
8. Examine health and wellbeing profiles of recently transitioned ADF members who are identified as using IPV.
9. Profile help-seeking behaviours and patterns of service use among transitioned ADF personnel who are identified as using IPV.

## Approach

This project is based on analyses of cross-sectional survey data from the Transition and Wellbeing Research Programme ('The Programme'), which was a large-scale study of the impact of military service on the health and wellbeing of ADF members and families that was conducted in 2015. This consisted of major components, including:

**The Mental Health and Wellbeing Transition Study (MHWTS)** which comprised surveys of ADF members who had **recently transitioned** from the Regular ADF between 2010 and 2014, and a comparison sample of permanent, full-time **current serving** members; and

**The Family Wellbeing Study (FWS)** which comprised surveys of family members of transitioned and current serving members who nominated a family member to take part.

The Impact of Combat Study comprised a third component of The Programme but is not considered in this report. Rather, the current analyses were based on data from transitioned and current serving personnel (from the MHWTS) who reported involvement in an intimate relationship, along with family members who were identified as intimate partners of personnel (from the FWS). The samples thus

[1] The current report uses the terms 'ex-serving', 'former serving', and 'veteran' interchangeably.

comprised n = 2,881 transitioned personnel (mean age = 43.5 years, 86.4% men, 56.8% ex-Army personnel) and n = 6,246 current ADF members (mean age = 41.8 years, 82.5% men, 41.5% Army personnel) who were in relationships, who reflected 66.6% and 73.7% of original samples respectively. Samples of intimate partners of transitioned members (n = 300, mean age = 45.1 years, 93.0% women, 56.4% partners of ex-Army personnel) and current serving members (n = 662, mean age = 42.5 years, 91.2% women, 41.5% partners of Army personnel) reflected 65.5% and 71.3% of the total samples respectively.

There was also a sub-sample of transitioned personnel who provided consent for their responses to be linked with data from family members in the FWS. Among the transitioned personnel who had partners participate, there were *n* = 266 who agreed to data linkage and this 'couples' dataset' was also analysed.

The self-report measure of IPV exposure comprised items from the Woman Abuse Screening Tool (WAST). The items referenced the current relationship ("*Thinking about your current partner, please answer the following questions*"), as follows:

1. Do arguments ever result in hitting, kicking or pushing?
2. Do you ever feel frightened by what your partner says or does?
3. Has your partner ever abused you physically?
4. Has your partner ever abused you emotionally?
5. Has your partner ever abused you sexually?

There were different response options used for these items across the MHWTS (ranging from 'Never' to 'Sometimes') and the FWS (ranging from 'Never' to 'Often'). For most analyses, exposure was defined by an overall measure of 'Any IPV exposure' which reflected non-zero scores on any items.

## Limitations

The findings below should be considered in relation to key methodological limitations of the available data. For example:

- Analyses were based on cross-sectional data, which means that the direction of effect and any causal processes underlying associations remains unclear.
- WAST items were only administered to participants in current relationships, which may exclude IPV used by former partners and produced analytic samples that tended to over-represent older participants.
- WAST survey items were coarse and were not anchored to clear examples of behaviour and did not yield information about the impacts of IPV or coercive and controlling behaviours.
- There is limited evidence supporting the psychometric properties of the WAST screening measure.
- A subset of items from the WAST was used to identify IPV exposure – these items were content-valid but were not comparable with prior research that has previously used the scale.
- WAST items were embedded in a preamble which asked about experiences in the current relationship, whereby the recency of relevant exposures (e.g. in the past year or month) remains unclear and did not provide evidence regarding past-year prevalence.
- FWS data was not fully representative of the population of all partners and family members.

- Data were mainly collected in 2015 and it does not provide insights into recent experiences of violence (for example, subsequent to the COVID-19 pandemic).

## Findings

Findings from this project were derived from a range of analyses that were organised in relation to several key sections that addressed specific aims.

**IPV Frequencies:** This section reports findings from descriptive analyses of the frequencies of self-reported IPV exposure across samples of recently transitioned ADF personnel, current serving members, and the partners of both transitioned and current serving personnel. Key findings included:

- There were 28.9% of all recently transitioned ADF members who reported exposure to any IPV in their current relationship, relative to 22.5% among current personnel.
- Among partners of transitioned ADF members, 45.5% reported exposure to any IPV in the current relationship, relative to 24.1% among partners of current personnel.
- Emotional IPV was the most common type of violence reported across groups, followed by physical IPV. For example:
    - Among transitioned personnel, 26.6% of respondents reported exposure to emotional IPV, in comparison with 9.7% who reported physical IPV.
    - Among partners of transitioned personnel, 43.6% reported exposure to emotional IPV, and 9.1% reported exposure to physical IPV.
    - Among current serving personnel, 20.8% reported exposure to emotional IPV, in comparison with 6.0% who reported physical IPV.
    - Among partners of current serving personnel, 22.8% reported exposure to emotional IPV, and 2.4% reported exposure to physical IPV.
- Rates of self-reported IPV exposure among recently transitioned and current ADF members were similar across men and women.

Although there are no published studies that have considered the IPV measure used in this project in another Australian context, the 2016 Personal Safety Survey identified:

- 3.2% of women (2.9% of men) who reported experiencing emotional IPV by a current partner in the last year.
- 1.4% of women (0.8% of men) reported exposure to physical violence perpetrated by an intimate partner across the same period.

Thus, even based on imperfect comparisons that differ according to reference period (the WAST items referred to experiences in the current relationship), the results suggest rates of IPV exposure are elevated among transitioned personnel and current ADF members, relative to non-military populations.

**Risk and Protective Factors for IPV Exposure:** This section reports findings from analyses of factors that may account for increases or decreases in the likelihood of reporting IPV exposure among transitioned personnel and partners. Key findings included:

- For both transitioned personnel and partners, there were discernible clusters of risk factors for self-reported IPV exposure that reflected financial and economic difficulties, as well as trauma exposure.
- There was an additional cluster of protective factors that reflected levels of social connection and resources.
- Rates of self-reported IPV exposure were elevated in households with children.
- Transitioned personnel who were DVA clients and had received DVA treatment support since transition were also more likely to report IPV exposure at high levels (presumably difficulties that account for engagement with DVA services are also associated with IPV exposures).
- High relationship dissatisfaction was a major risk factor for self-reported IPV exposure among partners of transitioned personnel.

**Health and Psychosocial Correlates of IPV Exposure**: This section reports findings from analyses of associations with self-reported IPV exposure and health and wellbeing outcomes. Further analyses explored in depth the nature of associations with IPV exposure and measures of probable PTSD and suicidality among transitioned personnel. Key findings included:

- Among transitioned personnel, reports of IPV exposure were associated with increased risk for mental health conditions and psychosocial issues, including probable PTSD (which was elevated nearly four-fold among those who reported exposure to IPV) and suicidal ideation (which was elevated by more than three-fold among those who reported exposure to IPV).
- Among partners of transitioned personnel, reports of IPV exposure were associated with probable PTSD (which was elevated nearly three-fold among those who reported exposure to IPV) and suicidal ideation (which was elevated more than four-fold among those who reported exposure to IPV).
- There were smaller, but still significant, associations observed between reports of IPV exposure and poor physical health indicators among transitioned personnel and partners.
- Associations between reports of IPV exposure and suicidality were large and positive among men and women and were larger than associations with other forms of lifetime and military trauma.
- Associations between reports of IPV exposure and PTSD symptoms were similar in magnitude among men and women and were larger than associations with other forms of lifetime trauma.
- Reports of emotional and physical (as well as combined) forms of IPV exposure were all strongly associated with increased risk of probable PTSD and suicidality.
- The association between reports of IPV exposure and PTSD was stronger in the context of other stressful life events, trauma exposures and economic instability, but weaker in the context of high social support.

**IPV Exposure and Help Seeking:** This section reports findings from analyses of associations with reports of IPV exposure and health service utilisation, along with descriptive analyses of the help-seeking behaviours of transitioned personnel and partners who report IPV exposure. Key findings included:

- Among transitioned personnel and partners, reports of IPV exposure were associated with significantly increased rates of seeking assistance for mental health.

- More than 90% of transitioned personnel and partners who reported exposure to IPV also reported having visited any health provider in the past year.
- Among transitioned personnel who reported IPV exposure, the most common providers of mental health support were GPs/Medical Officers, psychologists and psychiatrists.
- Common presenting problems among individuals who reported exposure to IPV and presenting for mental health support included depression, anxiety, relationship problems, and sleep problems.
- Among transitioned personnel who reported IPV exposure, more than 85% reported having visited a GP in the past year for their own health, while more than half reported having visited specialist doctors or dental professionals.
- The most common resources that transitioned personnel who reported IPV exposure used to inform or assess their mental health included the DVA website, social media and ex-service organisations.

**IPV Use among Transitioned Veterans:** This section reports findings from analyses based on data from *n* = 266 couples in which veteran surveys were linked with partner reports of IPV exposure, and thus provide information regarding the presumed use of IPV by recently transitioned ADF personnel. Key findings included:

- There were 46.1% of all couples who identified any use of IPV by the veteran, and in around half of these cases the veteran also reported use of IPV by their partner.
- Risk and protective factors for presumed IPV use among transitioned personnel included factors linked to unemployment and income, financial status, trauma exposure and social resources (which reduced the risk of IPV use).
- Transitioned personnel who were identified as using IPV demonstrated complex mental health profiles which were reflected in very high rates of harmful drinking, suicidal ideation, probable PTSD, and depression.
- Transitioned personnel who were identified as using IPV also reported high rates of accessing mental health services and other health professionals.
- More than 90% of these personnel reported having visited a GP in the past year, while above 50% had visited dental professionals and one third had visited a psychologist.

## Implications

### Policy Implications

- Exposures to IPV, including emotional and physical forms of IPV, should be recognised as important issues that can influence the mental health of ex-service personnel and partners across the transition period.
- There is a need for an overarching policy framework that can guide planning and investments in IPV initiatives across military and veteran-specific settings, as well as Australian contexts.
- This policy framework may comprise a specific action plan for military and veteran families, which aligns with the forthcoming National Plan to End Violence against Women and Children 2022-2032.

**Strategies Addressing IPV Exposure**

- There is a need for enhanced strategies and programs to address IPV exposure among current and former military personnel, and their partners.
- This includes strategies for improving recognition and responses to emotional IPV, which is the most common form of exposure and is associated with poor mental health and psychosocial outcomes.
- Strategies are needed to target IPV exposures across multiple groups, including partners of current members and transitioned personnel, as well as current and former ADF members themselves. This also includes personnel who identify as men and those who identify as women.
- Transitioned personnel who reported IPV exposure were regularly encountered in mainstream health settings, and there is a need for strategies to improve recognition and responses to IPV among veterans and families in these settings.
- Transitioned personnel who reported IPV exposure were regularly encountered in veteran-specific service settings, and there is also a need to improve recognition and responses to IPV in these veteran-specific settings.
- Reports of IPV exposure were common in the context of high economic and financial hardship. Services providing financial or social assistance to veterans or partners, including ex-service organisations, may provide other important contexts for identifying and responding to IPV.
- Reports of IPV exposure were associated with high levels of mental health burden among transitioned personnel and partners, and this indicates the need for targeted mental health support when considering IPV as an index trauma.

**Strategies Addressing IPV Use**

- There is a strong need for initiatives to address the use of IPV by current and former military personnel in Australia, and particularly the use of emotional and physical violence by male veterans against their partners.
- Initiatives that target IPV use should include a focus on prevention, and thus consider the military environment as a workplace setting, where some drivers and cultural factors that reinforce the use of IPV are presumably established.
- Generalist healthcare services and welfare service settings may provide important contexts for identifying and engaging veterans that use IPV, and transitioned veteran status may be an index for vigilance for IPV use that can be integrated with existing guidelines.
- Veteran-specific mental health services also provide contexts for identifying and engaging veterans who use IPV and provide opportunities for trialing novel intervention approaches and programs for responding to IPV use among current and ex-service personnel.

**Implications for Research and Evaluation**

- Foundational research is needed to improve understanding the nature and context for violence experienced and used by current and former military members in Australia, which is critical to inform successful prevention programming.
- Relevant research should consider improved measures including direct questions about coercive and controlling behaviours.

- Qualitative and quantitative studies are needed to enhance and measure the impacts of programmatic responses to IPV across military and veteran-specific workplace and service settings.
- Research may also provide a context for developing and trialing new programs of support for veterans/partners who disclose IPV, including recovery-oriented interventions, as well as trauma-informed treatments or behaviour change programs for veterans who use violence.
- In addition to veteran-specific mental health services, there may be other contexts for IPV interventions which suggest the need for research to guide and improve potential programs.
- These may include pilot initiatives embedded in health services for current serving personnel, as well as alternative environments such as ex-service organisations that provide welfare assistance, and administrative sections of DVA that manage compensation claims and processes.

# Background

Intimate partner violence (IPV) is a major public health issue and can describe any behaviour in a current or former intimate relationship that causes physical, psychological or sexual harm [1]. This involves **physical and sexual** violence, as well as **psychological or emotional**[2] forms of abuse which can include threatening, degrading and coercive or controlling behaviours that aim to dominate the victim and restrict their autonomy. **Coercive and controlling behaviours** may involve isolating a person from family and friends, monitoring movements and restricting access to employment and financial resources [2]. Exposure to all forms of IPV—physical, sexual or emotional—is associated with physical health [3, 4] and mental health problems, including depression, anxiety and posttraumatic stress disorder (PTSD) [4-6]. The different forms of IPV commonly co-occur and the co-occurrence of these forms of violence (emotional and physical, or sexual and emotional and/or physical) has been associated with greater negative health impacts than singular abuse categories [4]. Although research has traditionally focussed on impacts of physical violence on victims, there is evidence that emotional abuse may be just as harmful as physical or sexual violence [7, 8], and can have additional implications for mental health [4, 6]. Recognising the unique impact of emotional IPV is important, given this has been identified as the most prevalent type of abuse in general population studies (U.S. based) [9] and in military populations [10]. These impacts all contribute towards significant economic consequences of all forms of IPV, which are partly attributed to costs from demands on medical and justice systems, and indirect costs via workplace impacts and reduced productivity [11, 12]. Studies of the economic impacts of all forms of IPV in Australia suggested costs between $8.1 billion and $9.9 billion annually based on 2007-08 data, which was projected to increase to $15.6 billion by 2021-22 [13].

International research typically indicates that IPV is a common concern among current and ex-serving military personnel, with many studies suggesting high rates of **exposure to any form of IPV** [10][3] and **use of any form of IPV** [14] across relevant populations. By way of illustration, a recent synthesis of international surveys and population screening studies indicated around one in five (21%) of all current personnel and veterans report recent exposures to IPV, with analogous figures of around one in eight (13%) for IPV use. [15] This review also indicated that IPV use and exposure were both typically common issues among men and women, while higher rates of use were found in studies of veterans or ex-service members (relative to current personnel), and in specific health services (relative to general samples recruited from military bases, for example). Furthermore, this review also identified gaps in available evidence, including limited research outside the U.S., and **no studies from Australia**. This is notwithstanding that IPV—inclusive of emotional and physical/sexual violence—comprises the single largest risk factor contributing to disease burden for women aged 25–44 years in Australia [16], and all Australian governments have endorsed commitments to ensuring sustained reductions in violence against women and children. These were enshrined initially in the first *National Plan to Reduce Violence and Women and their Children 2010-22* [17], and also in the *National Action Plan to End Violence Against Women and Children 2022-32* [18]

[2] For the purpose of this report, we refer to either psychological or emotional IPV as 'emotional IPV'.
[3] In the systematic review reported Sparrow et al. (2020), there were no studies of sexual IPV victimisation among male personnel identified.

**BOX 1: Definitions of risk and protective factors**

The Australian Institute of Health and Welfare (AIHW) [19] define a **'risk factor'** as:

> "Any factor that represents a greater risk of a health disorder or other unwanted condition or event. Some risk factors are regarded as causes of disease; others are not necessarily so."

Conversely, the AIHW define **'protective factors'** as those that:

> "Enhance the likelihood of positive outcomes and lessen the chance of negative consequences from exposure to risk".

For the purposes of this report, definitions of risk and protective factors include characteristics that are associated with greater or lower rates of IPV exposure, on the basis of correlational data. These do **not** reflect assumptions about causal or non-causal relationships underlying associations. Thus, risk factors (as defined currently) may reflect characteristics that are causally linked with IPV exposure, or alternatively, identify groups at increased risk of exposure, but are not causally implicated in increased vulnerability (in other contexts relevant 'non-causal' variables may be described in terms of 'risk markers'). Given the preliminary nature of scientific literature on most categories of risk and protective factors for IPV, it will usually be the case that it is not possible to confidently distinguish between causal or non-causal relationships underlying associations, hence use of inclusive definitions of risk and protective factors in this report.

International studies of current and ex-serving members provide evidence of potential **risk factors** for IPV, which are important since they suggest vulnerable groups that could be the focus of interventions (e.g. identification strategies), and may also highlight targets for programs that can reduce levels of exposure. For example, relevant studies from the U.S. and Canada have suggested both **socio-demographic** and **service-related** risk factors for IPV exposure that identify potentially vulnerable groups. These include military personnel or veterans who:

- Are women [20]
- Report attainment of less than a college degree [21]
- Report Army service (compared with other branches). [21]

**Family-related** and **psychosocial** risk factors for IPV exposure, particularly exposure to emotional IPV, have also been identified and suggest other vulnerable groups including current and ex-serving personnel who:

- Have greater numbers of children living in the household (among women personnel in particular) [22]
- Report high relationship dissatisfaction [22, 23]
- Report financial stress [22]
- Consume alcohol at risky or problematic levels. [22]

Conversely, a smaller number of studies have identified **protective factors** that are associated with reduced risks of IPV exposure. Among military personnel, high family income, perceived support from neighbours and high community cohesion have been described as protective against emotional IPV

exposure [22]. Such findings can be viewed in relation to ecological perspectives which recognise risk and protective factors across individual, relational, community and societal levels [24], and also suggest potential **roles of economic and social resources in reducing vulnerability to IPV exposure across emotional, physical and sexual forms** [25-27].

International studies have also demonstrated links with IPV and various **health and wellbeing outcomes** among current and ex-serving personnel, which are regularly interpreted as likely consequences of exposure. These interpretations should be viewed cautiously as they are based usually on cross-sectional research involving surveys at a single point of time, which do not shed light on processes that may account for associations. For example, the association between IPV and PTSD could indicate that exposure caused posttraumatic mental health problems, or alternatively, that these problems increase the risk of future IPV exposure. It is also possible both processes may hold, with mutual influences involving IPV and PTSD that unfold over time. Cross-sectional studies are usually unable to distinguish across these possibilities, which may have different implications for intervention approaches and policy. Notwithstanding this, the cross-sectional findings from relevant studies provide important early evidence of plausible consequences of IPV across domains of health and wellbeing, and thus can help demonstrate the importance and urgency of intervention programs situated in military and veteran-specific settings.

In relation to **mental health outcomes**, there are several large international studies of military personnel and veterans which have shown that IPV exposure, both physical/sexual and emotional, is associated with increased scores on measures of psychological distress [28][4], and elevated rates of mental health conditions, regardless of IPV subtype (i.e., emotional, physical and sexual) [29]. Such exposures have also been shown to be associated with conditions including PTSD, depression, and other anxiety and mood disorders, with similar findings observed across U.S. studies of female [29, 30] and male [31][5] veterans. Some research has also considered factors that may influence the strength of links between IPV exposure and mental health outcomes, and suggest a protective role for social support [see for example 28]. That is, associations between IPV exposure and distress may be reduced in the context of high social support [28]. These findings align with studies of non-military samples which also suggest factors (including social support) that may weaken or strengthen (i.e., moderate) links between physical/emotional IPV exposure with mental health and quality of life outcomes [32, 33]. Identification of protective factors can thus shed light on possible ways of minimising adverse mental health outcomes in the context of violence exposure.

Fewer studies have considered links between IPV exposure and indicators of **physical health** among current and ex-serving military personnel. However, preliminary research from the U.S. has shown that women veterans who reported IPV exposure were more likely to have an IPV-related brain injury [34], and those who experienced an IPV-related brain injury are at greater risk for poorer physical health [34, 35]. Unsurprisingly, relevant studies have also identified links with IPV exposure and metrics of **health service utilisation**, which have been demonstrated mainly in Veteran's Health Administration (VHA) services in the U.S. For example, Dichter et al. [36] examined the medical records of patients of VHA services and identified that women who disclosed IPV exposure in routine screening, which included various forms of IPV (not just physical), were more likely to report

[4] Skomorovsky and LeBlanc (2017) further demonstrated that exposure to emotional IPV was a significant predictor of psychological distress over and above the impact of physical/sexual IPV.
[5] Cerulli, Bossarte et al. (2014) only assessed for physical and sexual IPV.

subsequent healthcare encounters in the following six months, including use of inpatient and outpatient services, as well as primary care. Comparable links with IPV exposure and health outcomes and service use have been observed in non-military health contexts. This evidence has been foundational in establishing IPV exposure as a health-related concern that should be addressed in health service settings, including general practice [37].

Several other studies have demonstrated associations with IPV exposure and further indicators of wellbeing, including **suicidality** among current and former military personnel. For example, Belik et al. [38] reported findings regarding self-reports of exposure to traumatic events among Canadian personnel. They identified a five-fold increase in lifetime suicide attempts among women who reported histories of exposure to physical IPV (noting other forms of IPV were not measured). This association was stronger than links with all other military and non-military forms of trauma. Additional studies of current personnel and veterans from the U.S. have also shown that exposure to sexual and physical IPV are associated with concurrent suicidal ideation [39, 40] and suicide attempts [39, 41], and findings of such links have been observed among both men and women [41, 42][6]. These findings also align with growing non-military literature which has documented associations with IPV and suicide risk (noting that physical IPV has been the most commonly studied and for which the strongest evidence exists [43]), and suggest factors that could explain this link [44]. Proposed explanatory factors involve mental health problems that are associated with exposure to physical IPV [45, 46], as well as psychosocial stressors that may mediate the association between exposure to physical IPV and suicide risk [47]. Protective factors such as increased social support have been linked to reductions in suicidal risk amongst women exposed to physical and non-physical IPV [47, 48].

While the preceding literature has focussed on factors associated with IPV exposure, there is a discrete body of additional evidence that has addressed the **use of IPV** by current and former military personnel. Box 2 provides an overview of findings from key studies that relate to **risk factors and potential pathways** to IPV use among current and former military personnel. However, it is important to acknowledge that relevant studies have relied mainly on self-reports of violence used by personnel, and these should be viewed cautiously and in relation to likely reporting biases. Such biases have been illustrated by studies of non-military couples which have considered disagreement on measures of IPV use and exposure, including instances where both partners report on the same behaviours. That is, the **use of violence** by one partner should be reflected in disclosures of **IPV exposure** reported by the other. Notwithstanding this, recent analyses of data from U.S. couples suggest disagreements about the presence of violence, which are potentially due to both partners under-reporting their own use of severe (e.g. injurious) violence, relative to partner reports of exposure [49]. These analyses also suggested gendered patterns of disclosure, whereby men in particular seemed most likely to under-report their own use of violence (when their partners report IPV exposure), and their own exposure to IPV (when their partners reported IPV use) [49]. Such findings suggest that while partner reports of IPV exposure are imperfect and should be viewed cautiously, these may be the least subject to biases and provide the best available self-report indicators of IPV.

[6] Ursano et al. (2018) examined family violence, which is a broader construct than IPV, including experiences of sexual, physical or emotional abuse toward either a partner or a child.

## Study Aims

In the context of international evidence suggesting that IPV is a significant issue among current and ex-serving personnel, but with no Australian data available, the Australian Government Department of Veterans' Affairs (DVA) commissioned the current project involving secondary analyses of the Transition Wellbeing Research Programme ('The Programme'). The Programme comprises survey data from a representative sample of recently transitioned Australian Defence Force (ADF) members, and a comparative sample of current personnel, as well as the family members (including partners) of a sub-sample of these respondents. Among other things, the surveys of current and ex-serving personnel, as well as family members, included a self-report measure of **IPV exposure** [the Woman Abuse Screening Tool (WAST)] [50], which has not been subject to in-depth analyses. Accordingly, the aims of this project were to:

1. Examine rates of IPV exposure reported among recently transitioned ADF members, and how these compare to rates reported by current serving personnel.
2. Examine rates of IPV exposure as reported by the partners of recently transitioned and current serving ADF members.
3. Explore risk and protective factors for self-reported IPV exposure.
4. Examine the mental health, psychosocial and physical health correlates of reported IPV exposure, alone and when considered in addition to other forms of military and non-military trauma.
5. Describe the help-seeking behaviours and patterns of transitioned veterans and partners who report exposure to IPV.

A unique feature of the available data is that information from some partners was linked with survey information from ADF members. Consequently, these couples' data provided an opportunity to address questions relating to the use of IPV by veterans, as perceived by their partners. That is, reports of IPV exposure by intimate partners reflect the presumed **use of IPV by former ADF members**. Hence, these couples' data allowed examination of veteran-related factors that may be associated with partner-reported violent behaviours. Accordingly, a series of additional aims were developed in relation to the couples' data involving survey responses from both partners and aligned with the aforementioned aims that addressed IPV exposure. These were to:

6. Describe patterns of co-occurring IPV use (as reported by intimate partners) reported by transitioned veterans and their partners.
7. Explore veteran-related risk and protective factors for presumed IPV use among transitioned ADF members.
8. Examine the health and wellbeing profiles of recently transitioned ADF members who are identified by their partners as using IPV.
9. Profile the help-seeking behaviours and patterns of service use among transitioned ADF personnel who are identified by their partners as using IPV.

**BOX 2: Risk factors and 'pathways' to IPV use among current and ex-serving military personnel**

International studies have identified risk factors for self-reported IPV use—most commonly measured as physical/sexual IPV use—among current and ex-serving military personnel. These include **sociodemographic factors**, such as younger age, female gender and fewer years of education [23, 51-53], and **psychosocial factors** including relationship dissatisfaction, income and perceived financial stress [52]. These also include **service-related risk factors** such as fewer years of service and lower rank (which may relate to age), as well as deployment and trauma-related factors. The latter include exposure to combat [53] and war zone stressors [54], as well as posttraumatic mental health problems including PTSD [53, 54], alcohol problems [52] and anger [55].

Trauma-related risk factors have been considered in several studies of **pathways** to IPV use. For example, Portnoy et al. [56] examined a proposed trauma pathway to IPV use among women veterans from the U.S. and indicated that exposure to military sexual assault was associated with increased PTSD symptoms, and these could partly account for increased levels of physical and sexual IPV use. Comparable findings have also been reported in novel studies using data from couples (including veterans and partners), which have shown that trauma exposure may relate to physical IPV use indirectly via PTSD symptoms [57] and substance use [58].

Early conceptual accounts of this pathway have proposed that trauma can produce biases in processing of social information, and these biases increase the risk of conflict and some violent behaviours. However, **such explanations do not account for coercive and controlling behaviours** that often come to the attention of specialist services. In this context, recent studies of U.S. veterans have suggested additional pathways to IPV use which acknowledge the critical role of power and control motivations. For example, these suggest that trauma can trigger feelings of helplessness and loss of control that might precipitate the countervailing use of violence to exert control for some people [59].

Such accounts are highly speculative and there is much that remains unclear about the nature of violence and factors that account for IPV use among military personnel and veterans, including the role of military training and male-dominated occupational contexts. However, relevant studies provide indications of multiple possible pathways to IPV use, which also acknowledge the role of trauma, and underscore the need for further efforts to understand the processes that may underlie violent behaviours among current and former military personnel.

## Structure of this report

The remainder of this report is organised in six main sections.

**Part 1 – Methodology** provides an in-depth description of the project approach, including details of the Transition Wellbeing Research Programme design and samples, and an overview of the measures and analyses.

**Part 2 – IPV Frequencies** reports findings from descriptive analyses of the frequencies of self-reported IPV exposure across samples of recently transitioned ADF personnel, current serving members, and the partners of both transitioned and current serving personnel.

**Part 3 – Risk and Protective Factors for IPV Exposure** reports findings from analyses which considered factors that may be associated with increases or decreases in the likelihood of reporting IPV exposure among transitioned personnel and partners.

**Part 4 – Health and Psychosocial Correlates of IPV Exposure** reports findings from analyses of associations with IPV exposure and health and wellbeing outcomes, with further analyses exploring in-depth the nature of associations with IPV exposure and selected mental health and psychosocial outcomes among transitioned personnel.

**Part 5 – IPV Exposure and Help Seeking** reports findings from analyses of associations with self-reported IPV exposure and reports of health service utilisation, along with descriptive analyses of the help seeking behaviours of transitioned personnel and partners who report IPV exposure.

**Part 6 – IPV Use among Transitioned Veterans** reports findings from analyses that were conducted for a subset of couples for which veteran survey data could be linked with partner reports of IPV exposure, and thus provide information regarding factors associated with the presumed use of IPV by recently transitioned personnel.

# Part 1 – Methodology

## Participants and Procedure

This project is based on analyses of cross-sectional survey data from the Transition and Wellbeing Research Programme ('The Programme') [60], which was a large-scale study of the impact of military service on the health and wellbeing of ADF members and families. The Programme consisted of major components, including:

**The Mental Health and Wellbeing Transition Study (MHWTS)** which comprised surveys of ADF members who had **recently transitioned** from the Regular ADF between 2010 and 2014, and a comparison sample of permanent, full-time **current serving** members; and

**The Family Wellbeing Study (FWS)** which comprised surveys of family members of transitioned and current serving members who nominated a family member to take part.

The Impact of Combat Study comprised a third component of The Programme but is not considered in this report.

The survey methods associated with the MHWTS and the FWS are described in detail elsewhere [60]. Briefly however, the transitioned and current serving samples were derived from a Military and Veteran Research Study Roll which was generated from (a) member data from Defence, (b) contact data from DVA and (c) contact details from ComSuper. These were cross-referenced against the National Death Index. An email was sent to 23,974 transitioned ADF members and 20,031 current serving members inviting them to complete a 60-minute online survey. Participants could choose to have a survey distributed via post. Surveys were administered between June and December 2015. Responses were received from n = 4,326 transitioned ADF members (response rate = 18.0%) and n = 8,480 current serving ADF members (response rate = 42.3%). Previous analyses of responder profiles have demonstrated that participating samples were similar to target populations (recently transitioned and current serving ADF personnel) in terms of service, gender and medical fitness, but under-represented lower ranks [60].

MHWTS responders were asked to nominate a family member to participate in the FWS, which aimed to investigate the mental health and wellbeing profiles of family members of transitioned and current serving members [61]. There were 827 transitioned personnel and 1,577 current members that nominated a family member. An email was sent to these family members inviting them to complete a 30-minute online survey, which was administered between September 2015 and February 2016. There were n = 1,387 family members that participated, comprising 983 spouses/partners – including ex-partners (69%); 275 parents (20%); and 102 adult children (7%). Previous analyses have compared transitioned and current personnel respondents who nominated family members, versus those that did not, and identified the former were slightly older and over-represented higher ranks. The samples were otherwise similar in terms of gender, service and medical fitness [61]. Diagrams depicting participation rates across stages of the MHWTS and FWS are presented in Appendix 1.

The analyses in this report were based mainly on survey data from sub-samples of transitioned and current serving personnel, as well as their family members. These comprised transitioned and current

serving personnel who reported involvement in an intimate relationship, along with family members identified as intimate partners of personnel. Thus, the sub-samples excluded participants who were single/not in current relationships (and did not receive the measure of IPV), as well as family members who were parents and adult children.

Table 1.1 summarises participant numbers including total and analytic samples, and the distribution across respondent type and gender. As shown, the analytic samples comprised n = 2,881 transitioned personnel and n = 6,246 current ADF members who were in relationships, and these reflected 66.6% and 73.7% of original samples respectively. The analytic samples of intimate partners of transitioned members (n = 300) and current serving members (n = 662) reflected 65.5% and 71.3% of the total samples respectively. Relative to the original samples, the analytic samples tended to over-represent participants who were older (who were more likely to be in relationships) and reported greater numbers of years in service. Although the transitioned and current serving ADF member samples were predominantly men, there were sizable subgroups of women represented. In contrast, small numbers of family members in the FWS were men. The boxes below summarise key characteristics of survey samples that were analysed in the current report. Table 1.2A presents detailed characteristics for recently transitioned and current serving personnel and Table 1.2B presents equivalent characteristics for partners of transitioned or current serving personnel.

Table 1.1 Number of participants in a relationship by military status and gender.

| | **Total sample (n)** | | | **Analytic Subsample (n)** | | |
|---|---|---|---|---|---|---|
| | *Women* | *Men* | *Total* | *Women* | *Men* | *Total* |
| **MHWTS** | | | | | | |
| Transitioned personnel | 680 | 3646 | 4326 | 392 | 2489 | 2881 |
| Currently serving personnel | 1787 | 6692 | 8480 | 1095 | 5151 | 6246 |
| **FWS** | | | | | | |
| Family members of transitioned personnel | 399 | 59 | 458 | 279 | 21 | 300 |
| Family members of current serving members | 784 | 145 | 929 | 604 | 58 | 662 |

**Recently Transitioned Personnel**

- n = 2,881 (all in intimate relationships)
- n = 2,489 men and n = 392 women
- Mean age = 43.5 years
- Primarily ex-Army personnel (56.8%), Air Force (23.9%) and Navy (19.3%)
- 74.9% report having children

**Current Serving ADF Personnel**

- n = 6,246 (all in intimate relationships)
- n = 5,151 men and n = 1,095 women
- Mean age = 41.8 years
- Primarily Army personnel (41.5%), Air Force (35.1%) and Navy (23.4%)
- 75.7% report having children

**Partners of Transitioned Personnel**

- n = 300 (all partners)
- n = 21 men and n = 279 women
- Mean age = 45.1 years
- Nominators primarily ex-Army (56.4%), Air Force (29.5%) and Navy (14.0%)
- 78.0% report children with ex-ADF nominator

**Partners of Current Serving ADF Personnel**

- n = 662 (all partners)
- n = 58 men and n = 604 women
- Mean age = 42.5 years
- Nominators primarily Army personnel (41.5%), Air Force (35.1%), and Navy (23.4%)
- 82.5% report children with ADF nominator

Table 1.2A. Participant characteristics of transitioned and current serving personnel.

| | Transitioned (n = 2881) | | Current serving (n = 6246) | |
|---|---|---|---|---|
| | n | % | n | % |
| **Gender** | | | | |
| Male | 2489 | 86.4 | 5151 | 82.5 |
| Female | 392 | 13.6 | 1095 | 17.5 |
| **Age group (years)** | | | | |
| 18-27 | 212 | 7.4 | 3536 | 5.5 |
| 28-37 | 775 | 27.1 | 1731 | 28.1 |
| 38-47 | 780 | 27.3 | 2267 | 36.8 |
| 48-57 | 652 | 22.8 | 1663 | 27.0 |
| 58+ | 436 | 15.3 | 1630 | 2.6 |
| **Children** | | | | |
| No | 721 | 25.1 | 1514 | 24.73 |
| Yes | 2152 | 74.9 | 4713 | 75.7 |
| **Education** | | | | |
| Primary/Secondary school | 612 | 20.9 | 1397 | 22.2 |
| Certificate/Diploma | 1390 | 47.5 | 2535 | 40.3 |
| University | 922 | 31.5 | 2357 | 37.5 |
| **Service** | | | | |
| Army | 1672 | 56.8 | 2645 | 41.5 |
| Navy | 568 | 19.3 | 1495 | 23.4 |
| Air Force | 704 | 23.9 | 2237 | 35.1 |
| **Rank** | | | | |
| Commissioned Officer | 967 | 32.8 | 2782 | 43.6 |
| NCO/Other ranks | 1977 | 67.2 | 3595 | 56.4 |
| **Employment status** | | | | |
| Full/part time paid work | 2046 | 70.0 | - | - |
| Unemployed (incl. disability support pension) | 365 | 12.5 | - | - |
| Retired | 283 | 9.7 | - | - |
| Other (student, unpaid work) | 227 | 7.7 | - | - |
| **Main source of income** | | | | |
| Wage/salary/own business/partnership | 1808 | 62.1 | - | - |
| Age pension or Superannuation | 514 | 17.7 | - | - |
| Invalidity service pension or VEA/SRCA/MRCA compensation | 283 | 9.7 | - | - |
| Other | 305 | 10.5 | - | - |
| **Length of service (years)** | | | | |
| 0-4 | 310 | 10.8 | 172 | 2.8 |
| 5-9 | 592 | 20.7 | 1031 | 16.5 |
| 10-19 | 725 | 25.3 | 2280 | 36.6 |
| 20+ | 1233 | 43.1 | 2755 | 44.2 |

Table 1.2B. Participant characteristics of **partners** of transitioned and current serving personnel.

| | Transitioned (n=300) | | Currently serving (n=662) | |
|---|---|---|---|---|
| | n | % | n | % |
| **Gender** | | | | |
| Male | 21 | 7.0 | 58 | 8.8 |
| Female | 279 | 93.0 | 604 | 91.2 |
| **Age group (years)** | | | | |
| 18-27 | 8 | 2.7 | 27 | 4.1 |
| 28-37 | 78 | 26.0 | 184 | 27.8 |
| 38-47 | 87 | 29.0 | 261 | 39.4 |
| 48-57 | 86 | 28.7 | 174 | 26.3 |
| 58+ | 41 | 13.7 | 16 | 2.4 |
| **Children with nominator** | | | | |
| No | 66 | 22.0 | 115 | 17.5 |
| Yes | 234 | 78.0 | 543 | 82.5 |
| **Education** | | | | |
| Primary/Secondary school | 64 | 21.3 | 118 | 17.8 |
| Certificate/Diploma | 96 | 32.0 | 234 | 35.3 |
| University | 140 | 46.7 | 310 | 46.8 |
| **Service of ADF nominator** [1] | | | | |
| Army | 149 | 56.4 | 240 | 41.5 |
| Navy | 37 | 14.0 | 135 | 23.4 |
| Air Force | 78 | 29.5 | 203 | 35.1 |
| **Employment status** | | | | |
| Full/ part time paid work | 216 | 72.0 | 459 | 69.3 |
| Unemployed (incl. disability support pension) | 43 | 14.3 | 88 | 13.3 |
| Other (retired, student, unpaid work) | 41 | 13.7 | 115 | 17.4 |
| **Main source of income** | | | | |
| Paid employment | 166 | 55.3 | 309 | 46.7 |
| Spouse/partner's income | 98 | 32.7 | 329 | 49.7 |
| Other | 36 | 12.0 | 24 | 3.6 |
| **Partner ever part of ADF** | | | | |
| No | 245 | 81.7 | 546 | 82.5 |
| Yes | 55 | 18.3 | 116 | 17.5 |

[1] Linked data only (n=848; 2 cases missing on service)

## Linked data sub-sample – Couples' dataset

Recently transitioned personnel and current ADF members who participated in the MHWTS were asked for consent to link their survey data with responses from family members who they nominated for the FWS. Among the transitioned personnel who had partners participate in the FWS (*n* = 300), there were 88.7% (*n* = 266) who agreed to data linkage. This subsample comprising n = 266 ex-serving personnel (MHWTS participants) and their partners (FWS participants) was analysed in Part 5. Couples' data from current ADF members and their partners were not considered in order to limit the scope of these analyses and the current report. Previous analyses have identified no discernible differences between the transitioned MHWTS respondents with family data (but did not consent to linkage) and those with linked family data [61]. Item-level analyses identified limited missing data that did not exceed 3% for key measures and did not exceed 2% for any of the IPV items among both veterans and partners.

Table 1.3 presents participant characteristics for recently transitioned personnel and their partners who comprised the couples' dataset. The transitioned members in the linked sample were mostly male, had children and more than 80% had a post-school qualification. Over half had served in the Army, while 41% had been Commissioned Officers. Fifty-four per cent had served for over 20 years. While two thirds of the sample reported being in paid work, only 57% reported wage or salary as their main source of income. Only 14% of the linked sample of veterans reported no deployments.

Participant characteristics of partners that comprised the couples' dataset largely reflected the distribution of characteristics in the main sample. Most partners were female, and around 78% reported having children with the veteran, and more than 46% had a university education. Partners were slightly younger than veterans. Around 71% of these partners reported being in paid work, with another third reporting 'spouse/partner's income' as main source of income. Most intimate partners reported that their veteran partner had deployed while they were together.

Table 1.3. Participant characteristics of recently transitioned ADF veterans and their intimate partners comprising the couples' dataset.

| | **ADF nominator** | | **Intimate partner** | |
|---|---|---|---|---|
| | **n** | **%** | **n** | **%** |
| **Gender** | | | | |
| Male | 248 | 93.2 | 19 | 7.1 |
| Female | 18 | 6.8 | 247 | 92.9 |
| **Age group (years)** | | | | |
| 18-27 | 7 | 2.6 | 7 | 2.6 |
| 28-37 | 62 | 23.3 | 71 | 26.7 |
| 38-47 | 71 | 26.7 | 74 | 27.8 |
| 48-57 | 76 | 28.6 | 77 | 28.9 |
| 58+ | 50 | 18.8 | 37 | 13.9 |
| **Children**[1] | | | | |
| No | 43 | 16.3 | 57 | 21.4 |
| Yes | 221 | 83.7 | 209 | 78.6 |

[1] Veterans were asked whether they had children, while partners were asked whether they had children with the ADF veteran.

Table 1.3 (continued). Participant characteristics of recently transitioned ADF veterans and their intimate partners.

| | ADF nominator | | Intimate partner | |
|---|---|---|---|---|
| | n | % | n | % |
| **Education** | | | | |
| Primary/Secondary school | 39 | 14.7 | 59 | 22.2 |
| Certificate/Diploma | 127 | 47.7 | 84 | 31.6 |
| University | 100 | 37.6 | 123 | 46.2 |
| **Service** | | | | |
| Army | 149 | 56.4 | - | - |
| Navy | 37 | 14.0 | - | - |
| Air Force | 78 | 29.5 | - | - |
| **Rank** | | | | |
| Commissioned Officer | 108 | 40.9 | - | - |
| NCO/Other ranks | 156 | 59.1 | - | - |
| **Employment status** | | | | |
| Full/part time paid work | 176 | 66.7 | 190 | 71.4 |
| Unemployed (incl. disability support pension) | 35 | 13.3 | 38 | 14.3 |
| Retired | 30 | 11.4 | - | - |
| Other (student, unpaid work) | 23 | 8.7 | 38 | 14.3 |
| **Main source of income** | | | | |
| Wage/salary/own business/partnership | 150 | 56.6 | 146 | 54.9 |
| Age pension or Superannuation | 54 | 20.4 | - | - |
| Invalidity service pension or VEA/SRCA/MRCA compensation | 31 | 11.7 | - | - |
| Spouse/partner's income | - | - | 87 | 32.7 |
| Other | 30 | 11.3 | 33 | 12.4 |
| **Length of service (years)** | | | | |
| 0-4 | 19 | 7.2 | - | - |
| 5-9 | 53 | 20.1 | - | - |
| 10-19 | 50 | 18.9 | - | - |
| 20+ | 142 | 53.8 | - | - |
| **Ever deployed (veteran report)** | | | | |
| No | 38 | 14.4 | - | - |
| Yes | 226 | 85.6 | - | - |
| **Deployed while together (partner report)** | | | | |
| Never deployed | - | - | 38 | 14.4 |
| Deployed while together | - | - | 190 | 72.2 |
| Deployed not together | - | - | 35 | 13.3 |

# Measures

Key measures which were the focus of the current report are detailed below, while a summary of additional measures is provided subsequently.

*Intimate Partner Violence (IPV) exposure*

IPV exposure was assessed using a subset of items from Woman Abuse Screening Tool (WAST) [50], which comprised a total of eight questions that are presented in Table 1.4. As shown, the first three items address general relationship dynamics, while the remaining five address different dimensions of exposure to violent behaviours. Given that the first three items arguably provide ambiguous indications of potential IPV (as opposed to relationship conflict), these were not considered in the current analyses, which instead defined IPV exposure in terms of items 4–8. Accordingly, the IPV measure considered in this project included two items addressing exposure to physical violence (item 4 and item 6), two items that address emotional violence (item 5 and item 7), and one item that addresses exposure to sexual violence (item 8). All questions were framed in reference to the respondents' current partner. Further details of the available evidence relating to the psychometric properties of the WAST are provided in Box 3.

Table 1.4. Item details from the Woman Abuse Screening Tool (WAST).

| **Woman Abuse Screening Tool (WAST) items** | | **Response Options** | |
|---|---|---|---|
| *Thinking about your current partner, please answer the following questions.* | | *MHWTS* | *FWS* |
| 1. | In general, how would you describe your relationship? | (0) No tension<br>(1) Some tension<br>(2) A lot of tension | (0) No tension<br>(1) Some tension<br>(2) A lot of tension |
| 2. | Do you and your partner work out arguments with | (0) No difficulty<br>(1) Some difficulty<br>(2) Great difficulty | (1) Great difficulty<br>(2) Some difficulty<br>(3) No difficulty |
| 3. | Do arguments ever result in you feeling put down or bad about yourself? | (0) Never<br>(1) Rarely<br>(2) Sometimes | (0) Never<br>(1) Sometimes<br>(2) Often |
| 4. | Do arguments ever result in hitting, kicking or pushing? | (0) Never<br>(1) Rarely<br>(2) Sometimes | (0) Never<br>(1) Sometimes<br>(2) Often |
| 5. | Do you ever feel frightened by what your partner says or does? | (0) Never<br>(1) Rarely<br>(2) Sometimes | (0) Never<br>(1) Sometimes<br>(2) Often |
| 6. | Has your partner ever abused you physically? | (0) Never<br>(1) Rarely<br>(2) Sometimes | (0) Never<br>(1) Sometimes<br>(2) Often |
| 7. | Has your partner ever abused you emotionally? | (0) Never<br>(1) Rarely<br>(2) Sometimes | (0) Never<br>(1) Sometimes<br>(2) Often |
| 8. | Has your partner ever abused you sexually? | (0) Never<br>(1) Rarely<br>(2) Sometimes | (0) Never<br>(1) Sometimes<br>(2) Often |

Table 1.4 also shows different response options were used for the IPV exposure items across the MHWTS (ranging from 'Never' to 'Sometimes') and the FWS (ranging from 'Never' to 'Often'). In order to harmonise and maximise the comparability of findings from the MHWTS and the FWS, the response options for items in both survey samples were collapsed to form binary measures (0 =

Never, 1 = Rarely/Sometimes or Sometimes/Often). For most of the analyses, IPV exposure was defined in terms of an overall measure of 'any IPV exposure', which reflected non-zero scores and responses to any of the items 4–8 from the WAST. This consideration of an overall measure of any IPV that combines emotional, physical and sexual violence exposures aligns with the approach adopted in the most recent review of international studies of prevalence that also focussed on measures of any IPV in military and veteran samples [15].

**BOX 3: Psychometric evidence underlying the WAST**

The IPV items that were available for analyses in this project were derived from the eight-item Woman Abuse Screening Tool (see Table 1.4). This was identified in a 2016 systematic review as one of only three screening tools that assessed all dimensions of IPV (physical, emotional and sexual), and had been validated against an appropriate reference standard [62]. However, this review identified just two studies comparing the WAST specifically to a reference standard and only one of these considered properties of the entire eight-item scale. The first study considered just two initial items from the WAST that comprise general questions about relationship tension or difficulties and identified low sensitivity of such items (47%) [63]. The latter do not provide specific or unambiguous indicators of IPV experiences and have previously been identified as having low sensitivity to exposure [64]. The second study used scores of ≥4 on the eight-item WAST to identify IPV among Canadian women in primary care and reported high sensitivity (88%) when compared to a longer self-report measure of violence exposure. However, this study also indicted a tendency for the WAST to over-identify women as exposed to IPV [65], which may be due in part to inclusion of non-specific items in the WAST that measure broader dimensions of relationship difficulties, as opposed to IPV exposure, and thus may have low levels of content validity.

There have been a small number of studies published subsequently to the systematic search that informed the aforementioned review and reported on the psychometric properties of non-English translations of the WAST [66, 67]. However, we know of no recent studies that have reported psychometric evaluations of the WAST and are generalisable to English language contexts. Given the general lack of evidence that is available to distinguish across different approaches to scoring the measure, as well as concerns about the content validity of the first three items of the scale, the *a priori* decision was made in this project to use a subset of five items that most clearly reflect dimensions of physical, emotional and sexual IPV. This includes items from the WAST that have been described in terms of 'direct questions' about perceived physical, emotional and sexual IPV (e.g. Has your partner ever abused you physically) [68], as well as experiences of feeling frightened by the partner, which have been identified as important indicators of IPV exposure [69].

In the context of limited psychometric evidence that supports the English-language version of the WAST, including the subset of five-items used in the current analyses, the remainder of this report uses intentionally tentative language; for example, that references 'reported' IPV exposure and 'presumed' IPV use. This cautious language reflects uncertainty about the psychometric properties of the scale and should not be viewed as reflecting doubt about disclosures provided by women and men who had experienced IPV.

*Posttraumatic Stress Disorder (PTSD) symptoms*

PTSD symptoms were assessed using the Posttraumatic Stress Disorder Checklist—Civilian Version (PCL-C) [70]. Participants were asked to indicate their worst lifetime traumatic event from a list of events taken from the Composite International Diagnostic Interview (CIDI 3.0) PTSD module [71]. This list comprised 26 events for The Programme and 11 events for the FWS, including events such as being sexually assaulted and being mugged, held up or threatened with a weapon. Participants were then asked to think about their response to this question when they filled out the PCL-C. The PCL-C comprises a 17-item self-administered questionnaire, which has been widely used for assessing PTSD symptoms in the past month. Participants were asked to rate how much they had been bothered by symptoms of PTSD in the past month (e.g. repeated, disturbing memories, thoughts or images of a stressful experience from the past) on a five-point scale from 1 (not at all) to 5 (extremely). The PCL-C has excellent test-retest reliability and internal consistency, and has been used extensively in the context of population-based research [70]. A total symptom severity score was obtained by summing scores across items to give a score between 17 and 85, whereby higher scores indicate greater severity of PTSD symptoms. A total score of ≥30 was used to identify probable PTSD.

*Suicidal ideation and behaviour*

Suicidal ideation and behaviour were assessed using four items that asked about suicidal thoughts, plans and attempts in the last 12-months. Three of these items were adapted from the National Survey of Mental Health and Wellbeing [72] and the final item was devised by researchers for use in The Programme. Different sections of the report treated the suicide measures in different ways, including:

- Suicidal ideation: Participants that responded ‘yes’ to either of the first two items (‘Felt life not worth living’ or ‘Felt so low thought about committing suicide’) but did not report having a suicide plan or attempting suicide, versus those with no suicidal ideation.
- Suicide plan or attempt: Those that reported having a suicide plan or attempting suicide (irrespective of ideation), versus those with no plan or attempt.
- Any suicidality: Participants were coded as 0 if they responded ‘no’ to all four suicidal thoughts, plans and attempts in the last 12 months questions and coded as 1 if they responded ‘yes’ to any of those questions.

There were a large number of additional measures that were also considered across analyses and different sections of the report. Table 1.5 provides a high-level summary of these, along with key differences in measures that were available from the MHWTS and the FWS. Further details of these measures are also presented in Appendix 2.

Table 1.5. Supplementary constructs and measures examined in this report.

| Construct | Measure/item(s) | MHWTS | FWS |
|---|---|---|---|
| Socio-demographic characteristics | Gender, age, education, employment status, main source of income | X | X |
| | Relationship status | X | |
| | Relationship to nominator | | X |
| Service-related characteristics | Service, rank, length of service, serving status, ever deployed | X | |
| | Respondent ever part of ADF, nominator ever deployed/deployed while together, relocations due to nominator's service, parental history with ADF | | X |
| Discharge-related characteristics | Years since transitioned, medical separation, DVA client, DVA treatment support since transition (white or gold card) | X | |
| Traumatic deployment exposures | Number of a list of 12 deployment exposures they had experienced during their military career | X | |
| Family characteristics | Household structure | X | |
| | Children, having a spouse/partner affiliated with the ADF | X | |
| | Lives with nominator, children with nominator, length of relationship, number of people in household | | X |
| Financial problems | Current financial status - Given your current needs and financial responsibilities, would you say that you and your family are... Prosperous – Very poor | X | |
| | Current financial hardship - Are you currently having any problems paying money you owe? | X | X |
| | Recent major financial crisis - In the last 12 months: You had a major financial crisis | X | |
| Housing stability | In the past two months, have you been living in stable housing that you own, rent or stay in as part of a household? | X | |
| | Are you worried or concerned that in the next two months you may NOT have stable housing that you own, rent or stay in as part of a household? | X | |
| Homelessness | Ever without a permanent place to live | | X |
| Employment instability | In the last 12 months: You were sacked from your job | X | |
| | In the last 12 months: You became unemployed or you were seeking work unsuccessfully for more than one month | X | |
| Support | Schuster Social Support Scale (family and friends) [73] | X | |
| | Number of close friends | | X |
| ADF sense of identity | Four items adapted from the Allen and Meyer Affective Commitment Scale | X | |
| Ex-service organisations | Member of any ex-service organisations | X | |
| Lifetime trauma exposure | A list of 24 traumatic events taken from the Composite International Diagnostic Interview (CIDI 3.0) PTSD module | X | |
| | A list of 11 traumatic events taken from the Composite International Diagnostic Interview (CIDI 3.0) PTSD module | | X |
| Depressive symptoms | Patient Health Questionnaire (PHQ-9) [74] | X | |
| Psychological distress | Kessler distress scale (K10) [75] | X | X |
| Alcohol use problems | Alcohol Use Disorders Identification Test (AUDIT) [76] | X | X |

| Construct | Measure/item(s) | MHWTS | FWS |
|---|---|---|---|
| Anger | Dimensions of Anger Reactions five-item scale (DAR-5) [77] | X | |
| Problem gambling | Problem Gambling Severity Index (PGSI) [78] | X | X |
| Sleep | Insomnia Severity Index (ISI) | X | |
| General violence | Two-items about physical violence: threatening someone with physical violence and getting into a fight and hitting the person in the last month | X | |
| Contact with the law | In the last 12 months: You had problems with the police and a court appearance. | X | |
| Relationship breakdown | In the last 12 months: You had a separation due to marital/relationship difficulties OR You broke off a steady relationship | X | |
| Relationship problems | In the last 12 months: You had relationship problems with your spouse/partner | X | |
| Self-rated parenting quality | Overall, as a parent, do you feel that you are…. Not very good at being a parent, A person who has some trouble being a parent, An average parent, A better than average parent, A very good parent | X | |
| Relationship satisfaction | How satisfied or dissatisfied are you currently with your relationship with your partner? 0-10 point scale from completely dissatisfied to completely satisfied | X | |
| Unhappy couple relationship | Which best describes the degree of happiness, all things considered, in your relationship? Happy relationship vs. Unhappy relationship (extremely unhappy, fairly unhappy, a little unhappy) | | X |
| Head injuries | Ever experienced any of five types of head injury | X | |
| | Have you ever lost consciousness from being choked? | X | |
| Injuries | Did you experience any of the following injuries that required time off work during your military career? Fractures/broken bones, Musculoskeletal injuries, Burn injuries | X | |
| Self-rated health | Self-rated physical health over the past year: Excellent/Very good/Good vs. Fair/Poor | X | X |
| Pain severity | How would you rate your pain on a 0-10 scale at the present time, that is right now, where 0 is 'no pain' and 10 is 'pain as bad as could be'? | X | |
| Health conditions | Number of health conditions reported from a list of 67 conditions | X | |
| Help seeking behaviours and attitudes | List of stigmas and barriers to seeking help for problems with mental health | X | |
| | Ever been concerned about mental health | X | X |
| | Assistance for mental health in the last 12 months | X | X |
| | Ever had assistance for mental health | X | X |
| | Visited any health professional for your own health in the last 12 months | X | |
| | Resources used to inform/mental health in the past 12 months | X | X |
| | Preferred means of receiving information about mental health | X | |
| | Providers sought/received help from for mental health in that last 12 months | X | |
| | Primary and secondary reason for seeking care | X | X |
| | Health professionals visited for own health in the last 12 months | X | |
| Number of recent life events | | X | |

# Data Analyses

Data-file management and preliminary exploration, as well as substantive analyses, were conducted across software platforms including Program R (version 4.1) and Stata (version 17.0). Preliminary analyses involved quantification of the extent of missing data (e.g. due to item non-response), and were followed by substantive analyses, which were conducted subsequently and across five sections that addressed project aims.

## Preliminary Analyses

The analytic samples from the MHWTS were comprised of recently transitioned ($n$ = 2,881) and current serving ($n$ = 6,246) personnel who were currently in a relationship. Item-level frequency analyses were conducted initially to screen for missing data, and identified no measures considered in the report that were characterised by >5% missing data. These levels were <1% for the WAST items used to identify IPV. The analytic samples from the FWS included partners of transitioned ($n$ = 300) and current serving ($n$ = 662) personnel. Item-level missing data analyses within these samples were also below 5% in all instances, except for reports of the number of relocations, which was missing data for 13% of eligible participants. Missing data on WAST items was 2.5% for physical IPV and did not exceed 2% for the remaining items. Given typically low levels of missing data overall, this was managed using pairwise deletion strategies.

A series of power analyses for logistic regression models were conducted to help contextualise the interpretation of statistically significant and non-significant (at $p < 0.05$ levels) associations across samples. Given the fixed size of the samples, the analyses indicate the power underlying statistical tests and the ability to detect significant Odds Ratios (ORs) of different sizes across data sets. Details of these analyses are presented in Appendix 7, which indicates that both the MHWTS and FWS were adequately (>80%) powered to detect ORs greater than 1.35. The larger sample size for the MHWTS provided adequate power to detect associations as small as 1.15. In contrast, the couples' dataset was only powered to detect larger effects (OR >1.55) due to the smaller sample size. Further assumptions underlying regression models (including tests for influential observations) were also examined and confirmed.

## Part 2 – IPV Frequencies

This section involved the production of frequency analyses which was conducted for the measure of any IPV, and for physical, emotional and sexual IPV item subsets. Sampling weights were available for the MHWTS data and were used to generate weighted estimates for both transitioned personnel and current ADF members. However, most of the analyses considered the unweighted figures which were most comparable with the FWS data (no sampling weights were available for the latter).

## Part 3 – Risk and Protective Factors for IPV Exposure

This section involved a series of regression analyses which examined variability in rates of IPV exposure according to several different categories of risk and protective factors. These comprised binary logistic regression models in which any IPV exposure was specified as a two-level (No IPV exposure; Any IPV exposure) outcome variable. This was regressed on socio-demographic, family,

service, discharge and psychosocial characteristics, that were all considered as explanatory variables in separate models. Accordingly, there were no statistical adjustments for covariates, and regression models were specified mainly to produce standardised effect size indices that would quantify each association. The latter comprised Odds Ratios (ORs) along with 95% Confidence Intervals (CIs). Small cell sizes (n <5) were suppressed to maintain the anonymity of participants in this and all following sections.

## Part 4 – Correlates of IPV Exposure

This section initially involved a series of regression analyses which were conducted to quantify variability in mental health, psychosocial and health-related outcomes that were associated with levels of any IPV exposure. Outcome variables reflected a mix of categorical (grouping) variables and scales that were approaching continuous measurement (described as quasi-continuous). For the categorical outcomes, analyses comprised binary logistic regression models, while for quasi-continuous outcomes they comprised linear regressions. For both model types, any IPV exposure was specified as a two-level (No IPV exposure; Any IPV exposure) independent variable. Mental health, psychosocial and health-related outcomes were regressed on any IPV in separate models, which were initially unadjusted to produce bivariate estimates. These models were then repeated while adjusting for age, gender and education. ORs along with 95% CIs were produced to quantify the magnitude of associations for categorical outcomes, while standardised Beta values were produced to quantify the magnitude of associations for continuous outcomes.

A subsequent series of targeted analyses were conducted to further explore some specific associations that were observed in the preceding models. These included regression analyses that:

- Were conducted separately for men and women.
- Were ‘benchmarked’ relative to other statistical predictors (for example, the association with IPV exposure and probable PTSD was benchmarked relative to associations with other forms of trauma exposure).
- Considered associations with selected outcomes and exposures to emotional and physical forms of IPV when examined separately.
- Provided statistical tests of moderation where appropriate.

## Part 5 – IPV Exposure and Help Seeking

This stage initially involved logistic regression models which were conducted to examine whether IPV exposure could predict variability in rates of health care use among transitioned personnel and partners. Further analyses were largely descriptive and involved generating frequencies to indicate specific health services that were commonly used by transitioned personnel who reported IPV exposure.

## Part 6 – IPV Use among Transitioned Veterans

This stage focused on data from n = 266 couples in which veteran surveys were linked with partner reports of IPV exposure, which were interpreted in terms of the presumed use of IPV by recently transitioned veterans. There were a range of analyses conducted in this section, which largely paralleled the analyses described in Parts 2–5. These included (a) frequency analyses for IPV rates

(considering reports of IPV provided by both partners), (b) regression models that examined veteran-related risk and protective factors for IPV use, (c) regression models that quantified the mental and physical health profiles of transitioned veterans that used IPV, and (d) regression and descriptive analyses that quantify patterns of health care usage among veterans that used IPV.

# Part 2 – IPV Frequencies

**KEY POINTS**

- There were 28.9% of all recently transitioned ADF members who reported exposure to any IPV in their current relationship, relative to 22.5% among current personnel.
- Among partners of transitioned ADF members, 45.5% reported exposure to any IPV in the current relationship, relative to 24.1% among partners of current personnel.
- Emotional IPV was the most common type of violence reported across groups, followed by physical IPV. For example, among partners of transitioned personnel 43.6% reported exposure to emotional IPV and 9.1% reported exposure to physical IPV.
- Rates of IPV exposure reported among recently transitioned and current ADF members were similar across men and women.
- There were between 0.2% and 1.4% of recently transitioned and current personnel or partners who reported exposure to sexual IPV.

## Overview

This section reports findings from analyses of the frequency of self-reported exposure to any IPV among recently transitioned ADF personnel, current serving members, and the partners of both transitioned and current personnel. Accordingly, the current section addresses the initial aims of this project, which were to:

1. Examine the overall levels of IPV exposure reported among recently transitioned ADF members and how these compare to rates reported by current serving personnel; and

2. Examine rates of IPV exposure as reported by the intimate partners of recently transitioned and current serving ADF members.

Findings which relate to reports of IPV exposures among partners of current and former ADF members can be interpreted as the presumed use of violence by these transitioned members and current personnel. As far as we know, there have been no prior studies from Australia that have reported the frequency of IPV exposure in military or veteran populations. Accordingly, these will be the first figures that demonstrate the likely extent of the problem in relevant samples and an Australian context.

As described in Part 1, IPV exposure was measured using five items which included questions referencing physical, emotional and sexual violence. The response options for these items were collapsed to produce binary measures of any IPV exposure that support comparison across surveys of transitioned and current personnel, and partners. The collapsing of response options also facilitated comparison of IPV exposure rates across the MHWTS and FWS data sources, despite different item-level response options being used in these studies (see Table 1.4 in the previous section). All items referenced experiences in the current relationship, as opposed to a reference period such as the past year. For this research, the current report adopts terminology of IPV rates or frequencies, rather than IPV prevalence (which tends to be associated with occurrence over a particular time period).

# Findings

Table 2.1 presents findings from frequency analyses of IPV exposure reports among recently transitioned and current serving ADF members, as well as the partners of these personnel, when considered across men and women. As shown, there were 28.9% of all transitioned ADF members that reported any IPV exposure in their current relationship, while figures were lower (22.5%) among current personnel. Such figures equate to more than **one in four** of all recently transitioned ADF members that report IPV exposure, and more than **one in five** of all current personnel. Rates were similar among both women and men.

Sampling weights calculated as part of the MHWTS were available for data from transitioned and current serving members, and were used to generate figures that were representative of their respective target populations [60]. These weighted estimates were not substantially different from the unweighted figures and indicated 28.4% of transitioned personnel (women: 26.4%, men: 28.7%) that reported any IPV exposure, along with 21.0% of current serving personnel (women 18.8%, men 21.2%).

Among partners of recently transitioned personnel, there were 45.5% that reported any IPV exposure in the current relationship, while figures were lower but still substantial among partners of current serving personnel (24.1%). Separate estimates for IPV exposure among women and men partners are also reported, although rates among men should be viewed cautiously given small numbers of respondents.

Table 2.2 presents findings from frequency analyses of IPV exposure reports when measures were distinguished by items addressing different types of emotional, physical and sexual violence. As shown, emotional IPV was the most commonly reported type of exposure among all groups, which was followed by physical IPV. For example, among recently transitioned personnel, there were 26.6% of respondents that reported exposure to emotional IPV, in comparison with 9.7% that reported physical IPV. Among partners of transitioned personnel, there were 43.6% that reported exposure to emotional IPV, in comparison with 9.1% that reported physical IPV. Although less common than rates of emotional IPV, the reported levels of physical IPV exposure were non-trivial and correspond to roughly one in 10 of all recently transitioned ADF members, and near one in 10 of all partners of transitioned members. Sexual IPV exposure was reported by generally small numbers of survey respondents across groups.

Further analyses which were broken down to the level of individual items measuring IPV exposure are provided in Appendix 3.

Table 2.1. Rates of self-reported IPV exposures among recently transitioned personnel, currently serving personnel, and partners of transitioned and currently serving personnel, by gender.

| | Women | | Men | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **Any IPV** | | | | | | |
| Transitioned personnel | 118 | 30.1 | 714 | 28.7 | 832 | 28.9 |
| Currently serving personnel | 215 | 19.6 | 1189 | 23.1 | 1404 | 22.5 |
| Partners of recently transitioned personnel | 124 | 46.1 | 8 | 38.1 | 132 | 45.5 |
| Partners of currently serving personnel | 136 | 23.6 | 16 | 28.6 | 152 | 24.1 |

Table 2.2. Rates of self-reported emotional, physical and sexual IPV exposure among recently transitioned and currently serving personnel and partners of transitioned and currently serving personnel, by gender.

| | Women | | Men | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **Emotional IPV** | | | | | | |
| Transitioned personnel | 104 | 26.5 | 661 | 26.6 | 765 | 26.6 |
| Currently serving personnel | 198 | 18.1 | 1102 | 21.4 | 1300 | 20.8 |
| Partners of recently transitioned personnel | 122 | 44.0 | 8 | 38.1 | 130 | 43.6 |
| Partners of currently serving personnel | 134 | 22.5 | 15 | 25.9 | 149 | 22.8 |
| **Physical IPV** | | | | | | |
| Transitioned personnel | 31 | 7.9 | 249 | 10.0 | 280 | 9.7 |
| Currently serving personnel | 52 | 4.7 | 320 | 6.2 | 372 | 6.0 |
| Partners of recently transitioned personnel | 25 | 9.0 | 2 | 9.5 | 27 | 9.1 |
| Partners of currently serving personnel | 13 | 2.2 | 3 | 5.2 | 16 | 2.4 |
| **Sexual IPV** | | | | | | |
| Transitioned personnel | 3 | 0.7 | 18 | 0.8 | 21 | 0.7 |
| Currently serving personnel | 2 | 0.2 | 13 | 0.3 | 15 | 0.2 |
| Partners of recently transitioned personnel | 3 | 1.1 | 1 | 4.8 | 4 | 1.4 |
| Partners of currently serving personnel | 5 | 0.8 | 1 | 1.7 | 6 | 0.9 |

# Part 3 – Risk and Protective Factors for IPV Exposure

**KEY POINTS**

- For both transitioned personnel and partners, there were discernible clusters of risk factors for presumed IPV exposure that reflected financial and economic difficulties, as well as histories of trauma exposure.
- There was an additional cluster of protective factors that reflected levels of social connection and resources.
- Rates of self-reported IPV exposure were elevated in households with children.
- Transitioned personnel who were DVA clients and had received DVA treatment support since transitioning also reported IPV exposure at elevated levels.
- High relationship dissatisfaction was a major risk marker for self-reported IPV exposure among partners of transitioned personnel.

## Overview

This section reports analyses which address the third aim of the project, which was to:

3. Explore risk and protective factors for self-reported IPV exposure.

Analyses comprised a series of logistic regression models in which measures of any IPV exposure were treated as the binary outcome variable, while potential risk and protective factors were treated as explanatory variables in separate (unadjusted) models. The findings from these analyses are organised in relation to four broad categories of risk and protective factors:

- Socio-demographic characteristics
- Family-related characteristics
- Service-related characteristics
- Psychosocial characteristics.

For explanatory variables that reflect categorical variables (or grouping factors, such as gender or Service), these models provide tests of whether rates of self-reported IPV exposure were significantly different (at $p < 0.05$ level) across groups. In order to support interpretation of significant effects, group specific percentages are reported, along with Odds Ratios (ORs) and 95% Confidence Intervals (CIs) that quantify the magnitude of associations.

Given that there may be unique factors that account for IPV risk among current serving personnel and partners, relative to transitioned personnel and their partners, there were separate analyses of data from the current serving samples. Relevant findings for current serving members and their partners are presented in Appendix 4, with brief consideration at the end of this section.

# Findings

## Socio-demographic characteristics

Table 3.1A presents findings from logistic regression models which identify socio-demographic factors that were considered as possible risk or protective factors for any self-reported IPV exposure among **recently transitioned personnel**. As shown, the results identified no significant differences in levels of self-reported IPV exposure according to age or gender. However, there were significant differences in risk according to:

- **Main source of income**: Transitioned personnel who were on an invalidity service pension or VEA/SRCA/MRCA compensation demonstrated a 2.8-fold increase in risk of IPV exposure compared to those who derived income mainly from wages/salary/own business/partnership.
- **Employment status**: Transitioned personnel who were unemployed (including on disability pensions) demonstrated a 2.0-fold increase in risk of IPV exposure, relative to those who were in paid work.
- **Education**: Transitioned personnel who reported a Certificate or Diploma demonstrated a 1.3-fold increase in risk of IPV exposure, relative to those who reported highest education at primary school or high school levels.

Table 3.1B presents comparable regression models which identified socio-demographic factors that were considered as possible risk or protective factors for self-reported IPV exposure among **partners** of transitioned personnel. As shown, the results indicated no significant differences in the risk of reporting IPV exposure according to factors including age, gender, living with nominator or education. However, there were significant differences in risk observed according to:

- **Employment status**: Partners of transitioned personnel who were unemployed demonstrated a 2.2-fold increase in risk of IPV exposure, relative to those who were in paid work.
- **Main source of income**: Partners of transitioned personnel who reported that their partner/spouse was their main source of income demonstrated a 1.8-fold increase in risk of IPV exposure when compared to those reporting income derived mainly from paid employment.

Table 3.1A. Bivariate logistic regression models indicating **socio-demographic** risk or protective factors for any self-reported IPV exposure among recently transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Age group (years)** | | | | | | |
| 18-27 | 55 | 25.9 | | | | |
| 29-37 | 192 | 24.8 | 0.94 | 0.66 | 1.33 | 0.73 |
| 38-47 | 251 | 32.2 | 1.36 | 0.96 | 1.91 | 0.08 |
| 48-57 | 202 | 31.0 | 1.28 | 0.90 | 1.81 | 0.16 |
| 58+ | 126 | 28.9 | 1.16 | 0.80 | 1.68 | 0.43 |
| **Gender** | | | | | | |
| Male | 714 | 28.7 | | | | |
| Female | 118 | 30.1 | 1.08 | 0.86 | 1.36 | 0.50 |
| **Education** | | | | | | |
| Primary or Secondary school | 154 | 25.8 | | | | |
| Certificate or Diploma | 435 | 31.9 | 1.33 | 1.08 | 1.65 | 0.01 |
| University | 241 | 26.3 | 1.02 | 0.81 | 1.29 | 0.87 |
| **Employment status** | | | | | | |
| Full/part time paid work | 541 | 26.8 | | | | |
| Unemployed (incl. disability support pension) | 152 | 42.6 | 2.03 | 1.61 | 2.55 | <0.001 |
| Retired | 72 | 25.8 | 0.95 | 0.71 | 1.25 | 0.70 |
| Other (student, unpaid work) | 65 | 29.4 | 1.12 | 0.82 | 1.50 | 0.48 |
| **Main source of income** | | | | | | |
| Wage/salary/own business/partnership | 458 | 25.6 | | | | |
| Age pension or Superannuation | 152 | 29.7 | 1.22 | 0.98 | 1.52 | 0.07 |
| Invalidity service pension or VEA/SRCA/MRCA compensation | 134 | 48.7 | 2.75 | 2.13 | 3.55 | <0.001 |
| Other | 83 | 28.0 | 1.13 | 0.86 | 1.48 | 0.36 |

Table 3.1B. Bivariate logistic regression models indicating **socio-demographic** risk or protective factors for any self-reported IPV exposure among partners of transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Age** | | | | | | |
| 18-37 | 38 | 44.7 | | | | |
| 38-47 | 40 | 48.2 | 1.15 | 0.63 | 2.11 | 0.65 |
| 48-57 | 35 | 42.2 | 0.90 | 0.49 | 1.66 | 0.74 |
| 58+ | 19 | 48.7 | 1.18 | 0.55 | 2.51 | 0.68 |
| **Gender**[1] | | | | | | |
| Male | 8 | 38.1 | - | - | - | - |
| Female | 124 | 46.1 | | | | |
| **Education** | | | | | | |
| Primary or Secondary school | 30 | 49.2 | 1.23 | 0.67 | 2.26 | 0.50 |
| Certificate or Diploma | 43 | 45.3 | 1.05 | 0.62 | 1.78 | 0.85 |
| University | 59 | 44.0 | | | | |
| **Employment status** | | | | | | |
| Full/ part time paid work | 85 | 40.9 | | | | |
| Unemployed | 26 | 60.5 | 2.21 | 1.13 | 4.33 | 0.02 |
| Other (student, unpaid work) | 21 | 53.8 | 1.69 | 0.85 | 3.36 | 0.14 |
| **Main source of income** | | | | | | |
| Paid employment | 63 | 39.1 | | | | |
| Spouse/partner income | 51 | 53.7 | 1.80 | 1.08 | 3.01 | 0.02 |
| Other | 18 | 52.9 | 1.75 | 0.83 | 3.68 | 0.14 |

Notes: ADF nominator is the MHWTS respondent who nominated a family member to participate in the FWS.
[1] Inferential analysis not presented due to cell size <10

## Family-related characteristics

Table 3.2A presents findings from logistic regression models which examined family-related factors that were considered as possible risk or protective factors for any self-reported IPV exposure among **recently transitioned personnel**. As shown, the results indicated no significant differences in risk of reporting IPV exposure according to partner affiliation with the ADF. However, there were significant differences in risk observed according to:

- **Children living in the household:** Transitioned personnel who indicated they had children living in the household demonstrated a 1.9-fold increase in risk of IPV exposure, relative to those who did not have children at home.
- **Household structure:** Transitioned personnel who indicated that their household comprised a couple living with children demonstrated a 1.6-fold increase in risk of IPV exposure, relative to those who described their household as comprising a couple living alone.

Table 3.2B presents regression models which examined family-related factors that were considered as risk or protective factors for any self-reported IPV exposure among **partners** of recently transitioned personnel. None of the factors considered were significantly associated with risk of reporting IPV exposure, including household structure, length of relationship, and children with ADF nominator. However, the frequencies indicated generally high levels of IPV exposure across groups, with some possible trends that were not statistically significant in the context of smaller overall numbers of participants and thus lower levels of power (for example, rates of IPV exposure among partners who reported children with the ADF nominator were around 10% higher when compared to those who reported no children).

Table 3.2A. Bivariate logistic regression models indicating **family-related** risk or protective factors for any self-reported IPV exposure among recently transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Household structure** | | | | | | |
| Couple living alone | 189 | 23.3 | | | | |
| Person living alone | 16 | 20.5 | 0.85 | 0.46 | 1.47 | 0.58 |
| Couple with child(ren) | 568 | 32.0 | 1.55 | 1.28 | 1.88 | <0.001 |
| Married with dependents unaccompanied | 14 | 28.0 | 1.28 | 0.65 | 2.37 | 0.45 |
| Single parent with child(ren) | 10 | 30.3 | 1.43 | 0.64 | 2.98 | 0.35 |
| Other household type | 34 | 26.6 | 1.19 | 0.77 | 1.81 | 0.42 |
| **Children living in the household** | | | | | | |
| No | 138 | 19.1 | | | | |
| Yes | 692 | 32.2 | 1.91 | 1.57 | 2.35 | <0.001 |
| **Spouse/partner affiliated with ADF** | | | | | | |
| No | 639 | 29.4 | | | | |
| Yes | 193 | 27.3 | 0.90 | 0.74 | 1.09 | 0.27 |

Table 3.2B. Bivariate logistic regression models indicating **family-related** risk or protective factors for any self-reported IPV exposure among partners of transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI LB | 95% CI UB | p |
| **Household structure** | | | | | | |
| Couple living alone | 37 | 40.2 | | | | |
| Couple with child(ren) | 84 | 47.7 | 1.36 | 0.81 | 2.26 | 0.24 |
| Other household type (includes not living with nominator)[1] | 11 | 50.0 | 1.49 | 0.58 | 3.78 | 0.41 |
| **Children with ADF nominator** | | | | | | |
| No | 24 | 37.5 | | | | |
| Yes | 108 | 47.8 | 1.53 | 0.86 | 2.70 | 0.15 |
| **Length of relationship** | | | | | | |
| <10 years | 39 | 49.4 | | | | |
| 10-19 years | 34 | 43.0 | 0.77 | 0.41 | 1.45 | 0.43 |
| 20-29 years | 29 | 44.6 | 0.83 | 0.43 | 1.60 | 0.57 |
| 30+ years | 25 | 41.7 | 0.73 | 0.37 | 1.44 | 0.37 |
| **Number of people in household** | | | | | | |
| 1-2 | 50 | 45.5 | | | | |
| 3 | 23 | 41.8 | 0.86 | 0.45 | 1.66 | 0.66 |
| 4 | 39 | 47.6 | 1.09 | 0.61 | 1.93 | 0.77 |
| 5+ | 20 | 46.5 | 1.04 | 0.51 | 2.12 | 0.91 |

[1] FWS respondent report.

## Service-related characteristics

Table 3.3A presents findings from logistic regression models which identify a series of service-related factors that were considered as possible risk or protective factors for any self-reported IPV exposure among **recently transitioned personnel**. As shown, the results identified no significant differences in levels of IPV exposure reported according to factors including Service, time served in the regular ADF, deployment status and rank (although there was a marginally significant trend towards higher rates of IPV exposure among NCO/Other ranks, versus Commissioned Officers). However, there were significant differences in risk according to:

- **Serving status**: Transitioned personnel who identified as ex-serving demonstrated a 1.5-fold increase in risk of IPV exposure, relative to those who were active or inactive reservists.
- **Traumatic deployment exposures**: Relative to transitioned personnel who reported very low levels of trauma exposure during deployment, there were significant increases in risk of IPV exposure among transitioned personnel who reported medium, high and very high levels of trauma exposure. By way of illustration, very high levels of trauma exposure were associated with a 1.8-fold increase in the risk of IPV exposure.

Table 3.3B presents comparable regression models which examined service-related factors that were considered as risk or protective factors for any self-reported IPV exposure among **partners** of recently transitioned personnel. This shows that none of the service-related factors were significantly associated with risk of IPV exposure. The group-specific frequencies indicate generally high levels of IPV exposure across groups, with some possible trends that were not statistically significant in the context of smaller overall numbers of participants, and thus lower levels of power (for example, rates of exposure reported among partners who reported three or more relocations due to the nominators service were around 1.4-fold higher when compared to those who identified no relocations).

Table 3.3A. Bivariate logistic regression models indicating **service-related** risk or protective factors for any self-reported IPV exposure among recently transitioned personnel.

| | **IPV Frequencies** | | **Logistic Regression** | | | |
|---|---|---|---|---|---|---|
| | ***n*** | **%** | **OR** | **95% CI** | | **p** |
| | | | | **LB** | **UB** | |
| **Service** | | | | | | |
| Army | 485 | 29.8 | | | | |
| Navy | 152 | 27.4 | 0.91 | 0.73 | 1.12 | 0.37 |
| Air Force | 195 | 28.0 | 0.92 | 0.76 | 1.12 | 0.42 |
| **Rank** | | | | | | |
| Commissioned Officer | 255 | 26.7 | | | | |
| NCO/Other ranks | 577 | 30.0 | 1.19 | 0.99 | 1.41 | 0.05 |
| **Time served in Regular ADF** | | | | | | |
| 0-4 years | 66 | 26.9 | | | | |
| 5-9 years | 168 | 26.7 | 0.99 | 0.71 | 1.36 | 0.92 |
| 10-19 years | 214 | 28.8 | 1.08 | 0.79 | 1.49 | 0.62 |
| 20+ years | 376 | 30.3 | 1.15 | 0.86 | 1.56 | 0.34 |
| **Serving status** | | | | | | |
| Active or inactive Reservist | 490 | 26.0 | | | | |
| Ex-serving | 342 | 34.4 | 1.47 | 1.27 | 1.75 | <0.001 |
| **Ever deployed** | | | | | | |
| No | 129 | 26.0 | | | | |
| Yes | 703 | 29.5 | 1.18 | 0.95 | 1.46 | 0.14 |
| **Traumatic deployment exposures** | | | | | | |
| Very low (<=4) | 309 | 25.5 | | | | |
| Low (5-12) | 157 | 25.8 | 0.99 | 0.80 | 1.24 | 0.99 |
| Medium (13-22) | 163 | 32.6 | 1.39 | 1.11 | 1.74 | 0.003 |
| High (23-31) | 101 | 34.5 | 1.47 | 1.12 | 1.92 | 0.005 |
| Very High (32-48) | 102 | 38.6 | 1.84 | 1.39 | 2.42 | <0.001 |

Table 3.3B. Bivariate logistic regression models indicating **service-related** risk or protective factors for any self-reported IPV exposure among partners of transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Respondent also part of ADF / transitioned** | | | | | | |
| No | 112 | 47.3 | | | | |
| Yes | 20 | 37.7 | 0.68 | 0.37 | 1.25 | 0.21 |
| **Nominator ever deployed**[1] | | | | | | |
| Never deployed | 17 | 42.5 | | | | |
| Deployed | 114 | 46.3 | 1.17 | 0.59 | 2.30 | 0.651 |
| **Respondent's relocations due to nominator's service** | | | | | | |
| 0 | 25 | 37.9 | | | | |
| 1-2 | 27 | 46.6 | 1.43 | 0.70 | 2.92 | 0.329 |
| 3+ | 65 | 46.8 | 1.44 | 0.79 | 2.62 | 0.232 |
| **Respondent's parental history with ADF** | | | | | | |
| No | 98 | 45.6 | | | | |
| Yes | 34 | 45.9 | 1.01 | 0.60 | 1.72 | 0.96 |

[1] FWS respondent report

## Discharge-related characteristics

Table 3.4 presents findings from logistic regression models which examined a series of discharge-related factors that were considered as possible risk or protective factors for any self-reported IPV exposure among **recently transitioned personnel**. As shown, the results identified no significant differences in levels of IPV exposure reported according to years since transition. However, there were significant differences in risk according to:

- **Medical separation**: Transitioned personnel who reported a medical separation demonstrated a near two-fold increase in risk of IPV exposure, relative to those who reported a non-medical separation.
- **DVA client**: Transitioned personnel who reported being DVA clients demonstrated a 1.9-fold increase in risk of IPV exposure, relative to those who were not DVA clients.
- **DVA treatment support since transition**: Transitioned personnel who reported DVA treatment support since transition demonstrated a 1.7-fold increase in risk of IPV exposure, relative to those who did not receive DVA treatment support.
- **Member of any ex-service organisations**: Transitioned personnel who reported being members of an ex-service organisation demonstrated a 1.3-fold increase in risk of IPV exposure, relative to those who were not members of any ex-service organisation.

Table 3.4. Bivariate logistic regression models indicating **discharge-related** risk or protective factors for any self-reported IPV exposure among recently transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Years since transitioned** | | | | | | |
| 0 | 75 | 27.9 | | | | |
| 1 | 155 | 27.1 | 0.95 | 0.69 | 1.32 | 0.79 |
| 2 | 146 | 27.2 | 0.94 | 0.68 | 1.31 | 0.74 |
| 3 | 176 | 30.1 | 1.10 | 0.81 | 1.51 | 0.54 |
| 4 | 137 | 30.3 | 1.12 | 0.81 | 1.56 | 0.50 |
| 5+ | 111 | 30.4 | 1.12 | 0.80 | 1.59 | 0.50 |
| **Medical separation** | | | | | | |
| No | 609 | 26.1 | | | | |
| Yes | 221 | 40.7 | 1.97 | 1.62 | 2.38 | <0.001 |
| **DVA client** | | | | | | |
| No | 249 | 22.2 | | | | |
| Yes | 499 | 34.8 | 1.86 | 1.55 | 2.22 | <0.001 |
| **DVA treatment support since transition (white or gold card holder)** | | | | | | |
| No | 352 | 23.7 | | | | |
| Yes | 480 | 34.3 | 1.66 | 1.41 | 1.96 | <0.001 |
| **Member of any ex-service organisations** | | | | | | |
| No | 486 | 27.0 | | | | |
| Yes | 309 | 33.2 | 1.34 | 1.13 | 1.59 | <.0001 |

## Psychosocial characteristics

Table 3.6 presents findings from logistic regression models which examined psychosocial factors that were considered as possible risk or protective factors for any self-reported IPV exposure among **recently transitioned personnel**. As shown, the results identified significant differences in risk according to:

- **Financial problems**: Both indicators of financial problems were associated with reports of IPV exposure, which were elevated by a factor of 2.7 among recently transition veterans who identified major financial crises in the past year, and by a factor of 2.4 among those who identified current financial hardship (trouble paying money owed).
- **Housing instability:** Transitioned personnel who reported concern about stable housing demonstrated a 2.1-fold increase in risk of IPV exposure, relative to those who did not report these concerns.
- **Employment instability:** Transitioned personnel who reported unemployment or unsuccessfully seeking work in the past year demonstrated a 1.6-fold increase in risk of IPV exposure, relative to those who did not report such difficulties.
- **Lifetime trauma exposure:** Transitioned personnel who reported exposure to four or more lifetime traumatic events demonstrated a 2.2-fold increase in risk of IPV exposure, relative to those who reported zero to one instances of historical trauma.

Table 3.6. Bivariate logistic regression models indicating **psychosocial** risk or protective factors for any self-reported IPV exposure among recently transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Financial problems** | | | | | | |
| Current financial hardship (trouble paying money owed) | | | | | | |
| No | 618 | 25.6 | | | | |
| Yes | 208 | 45.8 | 2.43 | 1.98 | 2.98 | <0.001 |
| Major financial crisis in last 12 months | | | | | | |
| No | 679 | 26.5 | | | | |
| Yes | 141 | 48.5 | 2.69 | 2.11 | 3.42 | <0.001 |
| **Housing instability** | | | | | | |
| Concern may not have stable housing in next two months | | | | | | |
| No | 730 | 27.7 | | | | |
| Yes | 98 | 43.9 | 2.06 | 1.56 | 2.71 | <0.001 |
| **Employment instability** | | | | | | |
| Became unemployed or were seeking work unsuccessfully for more than one month in the last 12 months | | | | | | |
| No | 633 | 27.1 | | | | |
| Yes | 193 | 37.3 | 1.61 | 1.32 | 1.96 | <0.001 |
| **Lifetime trauma exposure** | | | | | | |
| 0-1 traumas | 205 | 21.2 | | | | |
| 2-3 traumas | 198 | 26.2 | 1.30 | 1.04 | 1.62 | 0.02 |
| 4+ traumas | 425 | 37.2 | 2.18 | 1.81 | 2.65 | <0.001 |

Table 3.7 presents findings from logistic regression models which examined additional psychosocial factors that were considered as possible risk or protective factors for any self-reported IPV exposure among **recently transitioned personnel**. These comprised quasi-continuous measures, rather than categorical or 'grouping' factors, and are thus presented separately to variables in Table 3.6. As shown, these results identified significant differences in risk according to:

- **Social support**: Higher levels of social support from both family and friends were associated with lower risk of IPV exposure. For example, the OR for the association between social support from family and IPV exposure was 0.67, which is a negative association that is equivalent to the risk of IPV increasing 1.5-fold for each one-point decrease on the social support scale.
- **Negative interactions**: Higher levels of negative interactions with both family and friends were associated with increased risk of IPV exposure. For example, each one-point increase on the negative interactions with family scale was associated with a 1.6-fold increase in the risk of IPV exposure.
- **Relationship satisfaction**: Higher levels of relationship satisfaction were associated with lower risk of IPV exposure. The effect size for this association (OR = 0.68) is equivalent to the risk of IPV increasing 1.5-fold for each one-point decrease on the relationship satisfaction scale.

Table 3.7. Bivariate logistic regression models indicating **psychosocial** risk or protective factors for any self-reported IPV exposure among recently transitioned personnel.

| | No IPV | | Any IPV exposure | | Logistic Regression | | | |
|---|---|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | OR | 95% CI | | p |
| | | | | | | LB | UB | |
| **Social interactions** | | | | | | | | |
| Family | | | | | | | | |
| Social support | 5.36 | 1.13 | 4.67 | 1.46 | 0.67 | 0.63 | 0.72 | <0.001 |
| Negative interactions | 3.42 | 1.99 | 5.34 | 2.13 | 1.56 | 1.50 | 1.64 | <0.001 |
| Friends | | | | | | | | |
| Social support | 4.22 | 1.51 | 3.65 | 1.67 | 0.80 | 0.76 | 0.84 | <0.001 |
| Negative interactions | 2.05 | 1.65 | 2.42 | 1.84 | 1.14 | 1.08 | 1.19 | <0.001 |
| **Relationship satisfaction** | 8.41 | 1.86 | 6.50 | 2.47 | 0.68 | 0.65 | 0.71 | <0.001 |
| **ADF sense of identity** | 13.31 | 3.96 | 13.14 | 4.10 | 0.99 | 0.97 | 1.01 | 0.310 |

Table 3.8 presents findings from logistic regression models which examined psychosocial factors that were considered as risk or protective factors for any self-reported IPV exposure among **partners** of recently transitioned personnel. As shown, the results identified significant differences in risk according to:

- **Financial problems**: Partners of transitioned personnel who reported current financial hardship (trouble paying money owed) demonstrated a 3.9-fold increase in risk of IPV exposure, relative to those who reported no such problems.
- **Housing instability:** Partners of transitioned personnel who reported having ever been without a place to live demonstrated a 1.7-fold increase in risk of IPV exposure, relative to those who did not report housing concerns.
- **Number of close friends:** Reports of fewer close friends were associated with increased risk of IPV exposure. For example, partners of transitioned personnel who reported zero to two friends demonstrated 2.2-fold increase in risk of IPV exposure, relative to those who reported three or more friends.
- **Lifetime trauma exposure:** Partners of transitioned personnel who reported exposure to four or more lifetime traumatic events demonstrated a 3.7-fold increase in risk of IPV exposure, relative to those who reported zero to one instances of historical trauma.

An additional regression considered the association with **relationship satisfaction** and IPV exposure and was presented separately given the former was a quasi-continuous measure (instead of a categorical or 'grouping' factor, like other variables in Table 3.8). The results showed that the partners of transitioned personnel who reported IPV exposure also reported significantly lower relationship satisfaction (mean 3.57, SD 0.81) than partners who did not report IPV exposure (mean 4.43, SD 0.54). The effect size for the association (OR = 0.15) was equivalent to the risk of IPV increasing 6.7-fold for each one-point decrease on the relationship satisfaction scale.

Table 3.8. Bivariate logistic regression models indicating **psychosocial** predictors of any self-reported IPV exposure among partners of transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Financial hardship** | | | | | | |
| Current financial hardship (trouble paying money owed) | | | | | | |
| No | 100 | 41.8 | | | | |
| Yes | 28 | 73.7 | 3.89 | 1.81 | 8.38 | <0.01 |
| **Housing instability** | | | | | | |
| Ever without a permanent place to live | | | | | | |
| No | 87 | 41.8 | | | | |
| Yes | 45 | 54.9 | 1.69 | 1.01 | 2.83 | 0.045 |
| **Number of close friends** | | | | | | |
| 3+ | 71 | 39.0 | | | | |
| 0-2 | 57 | 58.8 | 2.23 | 1.35 | 3.68 | <0.01 |
| **Lifetime trauma exposure** | | | | | | |
| 0-1 traumas | 61 | 40.7 | | | | |
| 2-3 traumas | 41 | 42.3 | 1.07 | 0.64 | 1.79 | 0.80 |
| 4+ traumas | 28 | 71.8 | 3.71 | 1.72 | 8.02 | <0.001 |

**RISK AND PROTECTIVE FACTORS AMONG CURRENT SERVING ADF PERSONNEL**

Findings from analyses of data from **current serving ADF personnel** are presented in Appendix 4. These identified groups that were particularly **vulnerable to self-reported IPV exposure**, which included personnel who identified:

- Living in a household with children
- Serving in the Army
- Having been deployed
- Having been exposed to traumatic incidents while deployed
- Financial hardship
- Unstable housing
- Negative interactions with friends and family
- High levels of lifetime trauma exposure.

These analyses also identified **protective factors** which included high levels of:

- Support from friends and family
- Relationship satisfaction
- Sense of identity with the ADF.

Appendix 4 presents further analyses that relate to partners of current serving ADF personnel. These also identified groups that were particularly **vulnerable to self-reported IPV exposure**, which included partners who reported:

- Being older than 48 years of age
- Unemployment
- Having children with the ADF member
- Having been in their relationship for 10 years or more
- Current financial hardship
- Having a parent who served in the ADF
- Four or more exposures to lifetime traumatic events.

These analyses also identified **protective factors** for partners which included having:

- Relocated for their partner's work once or twice (compared to never having relocated).
- Greater numbers of close friends
- Higher levels of relationship satisfaction.

# Part 4 – Health and Psychosocial Correlates of IPV Exposure

**KEY POINTS**

- Among transitioned personnel, reports of IPV exposure were associated with increased risk for mental health conditions and psychosocial issues, including probable PTSD (which was elevated nearly four-fold among those who reported IPV exposure) and suicidal ideation (which was elevated by more than three-fold among those who reported IPV exposure).
- Among partners of transitioned personnel, self-reports of IPV exposure were associated with probable PTSD (which was elevated nearly three-fold among those who reported IPV exposure) and suicidal ideation (which was elevated more than four-fold among those who reported IPV exposure).
- There were smaller but still significant associations observed between IPV exposure reports and poor physical health indicators among both transitioned personnel and partners.
- Associations involving reports of IPV exposure and any suicidality were large and positive among men and women, and were larger than associations with other lifetime and military traumas.
- Associations involving reports IPV exposure and PTSD symptoms were similar in magnitude among men and women, and were larger than associations with other lifetime traumas.
- Reports of emotional and physical forms of IPV exposure were all strongly associated with probable PTSD and suicidality.
- The association between reported IPV exposure and PTSD was stronger in the context of other stressful life events, trauma exposures, and economic instability, but weaker in the context of high social support.

## Overview

This section reports analyses which address the fourth aim of this project, which was to:

4. Examine the health and psychosocial correlates of IPV exposure, alone and when considered in addition to other forms of military and non-military trauma.

As far as we know, there have been no studies which have quantified the breadth and strength of links with IPV exposure and health or wellbeing outcomes among Australian veterans or their partners, and can thus demonstrate the nature of plausible consequences of these exposures across relevant populations.

The analyses conducted to address this aim were organised in two stages. **Stage 1** involved regression models in which self-reported IPV exposure was specified as an explanatory variable for potential outcomes which were organised in terms of mental health, psychosocial and physical health outcomes. In all instances, unadjusted models were estimated first, along with adjusted models which included basic socio-demographic control variables (age, gender and education). Descriptive statistics for groups that reported IPV exposure and no IPV exposure were provided, along with Odds Ratios (ORs) and 95% Confidence Intervals (CIs) that quantified the magnitude of associations.

The analyses conducted in the first stage identified salient associations involving self-reported IPV exposure and mental health and psychosocial outcomes. Accordingly, a series of analyses were conducted in **Stage 2** to provide in-depth exploration of selected links. Among other things these considered whether associations varied across men and women, and also factors that may alter the strength of (moderate) associations with reports of IPV exposure and key outcomes of interest.

# Findings

## Stage 1

### Mental health outcomes

Table 4.1A presents findings from logistic regression models which considered any self-reported IPV exposure as a possible explanatory factor of mental health outcomes among **recently transitioned personnel**. As shown, rates of all probable mental health conditions were significantly and substantially higher among transitioned personnel who reported IPV exposure, when compared to those that reported no exposure. Some of the strongest associations were observed for:

- **Probable PTSD**: Transitioned personnel who reported IPV exposure demonstrate a 3.8-fold increase in probable PTSD, relative to those who reported no exposure. There were 58.7% of transitioned veterans who reported IPV exposure and also reported probable PTSD.
- **Problem anger**: Transitioned personnel who reported IPV exposure demonstrate a 3.3-fold increase in probable PTSD, relative to those who reported no exposure. There were 45.4% of transitioned veterans who reported IPV exposure and also reported problem anger.
- **High psychological distress**: Transitioned personnel who reported IPV exposure demonstrated a 3.3-fold increase in high psychological distress, relative to those who reported no exposure. There were 54.6% of transitioned veterans who reported IPV exposure and also reported high psychological distress.

The associations described above were derived from unadjusted models, and effects remained significant and similar in magnitude when controlling for age, gender and education (see Table 4.1A).

Table 4.1B presents findings from comparable analyses which considered the mental health implications of self-reported IPV among **partners** of transitioned personnel. As shown, there were fewer mental health measures available from the FWS data that could be considered. However, the findings indicated that reports of IPV exposure was significantly associated with:

- **Probable PTSD**: Partners of transitioned personnel who reported IPV exposure demonstrated a 2.7-fold increase in probable PTSD, relative to those who reported no exposure. There were 36.7% of partners of transitioned veterans who reported IPV exposure and also reported probable PTSD.
- **High psychological distress**: Transitioned personnel who reported IPV exposure demonstrated a 2.2-fold increase in high psychological distress, relative to those who reported no exposure. There were 33.3% of transitioned veterans who reported IPV exposure and also reported high psychological distress.

These associations remained significant and were not substantially reduced in magnitude when controlling for age, gender and education.

Table 4.1A. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **mental health outcomes** among recently transitioned personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV | | Any IPV | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **PTSD (PCL-C ≥30)** | 551 | 27.2 | 481 | 58.7 | 3.79 | 3.21 | 4.49 | <0.001 | 3.96 | 3.33 | 4.71 | <0.001 |
| **Depression (PHQ ≥10)** | 410 | 20.2 | 371 | 44.8 | 3.24 | 2.72 | 3.85 | <0.001 | 3.31 | 2.77 | 3.96 | <0.001 |
| **High psychological distress (K10 ≥20)** | 544 | 26.7 | 450 | 54.3 | 3.28 | 2.78 | 3.88 | <0.001 | 3.39 | 2.85 | 4.03 | <0.001 |
| **Harmful drinking (AUDIT ≥16)** | 131 | 6.5 | 136 | 16.5 | 2.76 | 2.15 | 3.55 | <0.001 | 3.03 | 2.34 | 3.93 | <0.001 |
| **Alcohol dependence (AUDIT ≥20)** | 65 | 3.2 | 79 | 9.6 | 3.21 | 2.29 | 4.52 | <0.001 | 3.37 | 2.39 | 4.75 | <0.001 |
| **Problem anger (DAR ≥12)** | 408 | 20.1 | 375 | 45.3 | 3.31 | 2.78 | 3.93 | <0.001 | 3.66 | 3.04 | 4.41 | <0.001 |

[1] Adjusted for age, gender, and education level. *n* = 2,049 reported no IPV. *n* = 832 reported any IPV exposure.

Table 4.1B. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **mental health outcomes**[1] among partners of transitioned personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV | | Any IPV | | Unadjusted | | | | Adjusted[2] | | | |
| | *n* | % | *n* | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **PTSD (PCL-C ≥30)** | 27 | 17.5 | 47 | 36.7 | 2.73 | 1.58 | 4.73 | <0.001 | 2.78 | 1.60 | 4.85 | <0.001 |
| **High psychological distress (K10 ≥20)** | 28 | 18.3 | 43 | 33.3 | 2.23 | 1.29 | 3.87 | <0.01 | 2.24 | 1.28 | 3.90 | <0.01 |

[1]Analysis for AUDIT and PGSI are not presented due to cell size <5; [2] Adjusted for age, gender, and education level. *n* = 158 reported no IPV. *n* = 132 reported any IPV exposure.

## Psychosocial outcomes

Table 4.2A presents findings from logistic regression models which considered any self-reported IPV exposure as an explanatory factor of psychosocial outcomes among **recently transitioned personnel**. As shown, reports of IPV exposure were significantly associated with a range of psychosocial outcomes, and particularly strong associations were observed for:

- **Suicidality**: Transitioned personnel who reported IPV exposure demonstrated a 3.2-fold increase in the likelihood of reporting past year suicidal ideation, and a 3.9-fold increase in the likelihood of reporting a suicide plan or attempt. There were 37.2% of transitioned veterans who reported IPV exposure and also reported suicidal ideation.
- **Relationship problems**: Transitioned personnel who reported IPV exposure demonstrated a five-fold increase in the likelihood of reporting past year relationship problems. There were 47.2% of transitioned veterans who reported IPV exposure and also reported relationship problems.
- **General violence**: Transitioned personnel who reported IPV exposure demonstrated a near four-fold increase in the likelihood of reporting they had threatened or used physical violence (not necessarily with reference to family members) in the last month. There were 24.6% of transitioned veterans who reported IPV exposure and also reported using or threatening physical violence in the last month.

Table 4.2B presents findings from comparable analyses which considered the psychosocial implications of IPV exposure among **partners** of transitioned personnel. As can be seen, there were fewer psychosocial measures available from the FWS data that could be considered in these analyses. However, the findings indicated that IPV exposure was significantly associated with:

- **Suicidality**: Partners of transitioned personnel who reported IPV exposure demonstrated a 4.5-fold increase in the likelihood of reporting past year suicidal ideation. There were 29.5% of partners of transitioned veterans who reported IPV exposure and also reported suicidal ideation.
- **Relationship unhappiness**: Partners of transitioned personnel who reported IPV exposure demonstrated a four-fold increase in the likelihood of rating their current relationship with their partner as unhappy (either ‘Extremely unhappy’, ‘Fairly unhappy’ or ‘A little unhappy’). There were 37.9% of partners of transitioned personnel who reported IPV exposure and also rated their relationship as unhappy.

Table 4.2A. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **psychosocial outcomes** among recently transitioned personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV | | Any IPV | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Suicidality** | | | | | | | | | | | | |
| Suicide ideation | 302 | 15.5 | 267 | 37.3 | 3.21 | 2.64 | 3.89 | <0.001 | 3.35 | 2.75 | 4.08 | <0.001 |
| Suicide plan or attempt | 77 | 3.8 | 108 | 13.1 | 3.87 | 2.88 | 5.23 | <0.001 | 3.86 | 2.83 | 5.26 | <0.001 |
| **Sleep disturbance (ISI ≥15+)** | 318 | 16.1 | 289 | 35.9 | 2.92 | 2.43 | 3.52 | <0.001 | 2.97 | 2.45 | 3.60 | <0.001 |
| **General physical violence** | 155 | 7.6 | 207 | 25.0 | 3.98 | 3.18 | 4.99 | <0.001 | 4.36 | 3.44 | 5.52 | <0.001 |
| **Relationship problems** | 301 | 14.8 | 393 | 47.6 | 5.24 | 4.37 | 6.30 | <0.001 | 5.42 | 4.49 | 6.53 | <0.001 |
| **Self-rated parenting quality (below average)** | 139 | 9.6 | 161 | 23.5 | 2.86 | 2.24 | 3.67 | <0.001 | 2.94 | 2.27 | 3.77 | <0.001 |

[1] Adjusted for age, gender, and education level. *n* = 2,049 reported no IPV. *n* = 832 reported any IPV exposure.

Table 4.2B. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **psychosocial outcomes** among partners of recently transitioned personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV | | Any IPV | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Suicidal ideation** | 13 | 8.5 | 38 | 29.5 | 4.50 | 2.27 | 8.90 | <0.001 | 4.69 | 2.34 | 9.39 | <0.001 |
| **Relationship unhappiness** | 21 | 13.3 | 50 | 37.9 | 3.98 | 2.23 | 7.09 | <0.001 | 4.11 | 2.28 | 7.40 | <0.001 |

[1] Adjusted for age, gender, and education level. *n* = 158 reported no IPV. *n* = 132 reported any IPV exposure.

## Health outcomes

Table 4.3A presents findings from logistic regression models which considered any self-reported IPV exposure as an explanatory factor of physical health outcomes among **recently transitioned personnel**. As shown, reports of IPV exposure were significantly associated with:

- **Self-rated health**: Transitioned personnel who reported IPV exposure demonstrated a 2.5-fold increase in the likelihood of reporting 'Fair/Poor Health' relative to 'Good/Very Good/Excellent Health'.
- **Number of health conditions**: Transitioned personnel who reported IPV exposure demonstrated an increased number of health conditions, compared to those not reporting IPV exposure.

Reports of IPV exposure were also significantly (although relatively modestly) associated with:

- **Head injuries**: Transitioned personnel who reported IPV exposure demonstrated a 1.5-fold increase in the likelihood of reporting having ever had a head injury.
- **Musculoskeletal injuries**: Transitioned personnel who reported IPV exposure demonstrated a 1.4-fold increase in the likelihood of reporting a history of a musculoskeletal injury that required time off work during their military career.

There was also a modest association with reports of IPV exposure and having fractures/broken bones that required time of work during their military career, which was significant in the unadjusted model but not when controlling for age, gender, and education. In contrast, there was no clear evidence of associations with reports of having lost consciousness from choking and burn injuries that required time off work during their military career.

There were fewer physical health measures available from the FWS data that could be considered in analyses of the physical health implications of IPV exposure among partners. However, Table 4.3B indicates that reports of IPV exposure were significantly (although modestly) associated with:

- **Self-rated health**: Partners of transitioned personnel who reported IPV exposure demonstrated a 1.6-fold increase in the likelihood of reporting 'Fair/Poor health' relative to 'Good/Very good/Excellent health'.

Table 4.3A. Regression models of any self-reported IPV exposure as a predictor of **health outcomes** among recently transitioned personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV | | Any IPV | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Self-rated health** | | | | | | | | | | | | |
| Excellent/Very good/Good | 1442 | 70.6 | 402 | 48.5 | | | | | | | | |
| Fair/Poor | 601 | 29.4 | 427 | 51.5 | 2.53 | 2.14 | 2.98 | <0.001 | 2.62 | 2.21 | 3.11 | <0.001 |
| **Ever had a head injury** | 1335 | 69.3 | 606 | 76.6 | 1.45 | 1.20 | 1.76 | <0.001 | 1.46 | 1.21 | 1.78 | <0.001 |
| **Lost consciousness from being choked** | 53 | 4.0 | 33 | 5.5 | 1.37 | 0.87 | 2.11 | 0.15 | 1.52 | 0.96 | 2.39 | 0.06 |
| **Injuries requiring time off work during your military career** | | | | | | | | | | | | |
| Fractures/broken bones | 631 | 33.3 | 289 | 37.3 | 1.21 | 1.02 | 1.43 | 0.02 | 1.16 | 0.97 | 1.39 | 0.09 |
| Musculoskeletal injuries | 1326 | 69.4 | 596 | 75.8 | 1.36 | 1.13 | 1.65 | 0.001 | 1.40 | 1.15 | 1.70 | <0.001 |
| Burn injuries | 65 | 3.4 | 38 | 4.9 | 1.45 | 0.96 | 2.16 | 0.07 | 1.37 | 0.90 | 2.07 | 0.12 |
| **Number of health conditions** (M, SD, Beta) | (13.84) | (11.05) | (22.94) | (13.80) | (0.33) | 0.29 | 0.36 | <0.001 | (0.33) | 0.29 | 0.36 | <0.001 |

[1] Adjusted for age, gender, and education level. *n* = 2,049 reported no IPV. *n* = 832 reported any IPV exposure.

Table 4.3B. Regression models of any self-reported IPV exposure as a predictor of **health outcomes** among partners of recently transitioned personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV | | Any IPV | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Self-rated health** | | | | | | | | | | | | |
| Excellent/Very good/Good | 107 | 68.2 | 75 | 56.8 | | | | | | | | |
| Fair/Poor | 50 | 31.8 | 57 | 43.2 | 1.63 | 1.01 | 2.63 | 0.047 | 1.67 | 1.02 | 2.74 | 0.04 |

[1] Adjusted for age, gender and education level. *n* = 158 reported no IPV. *n* = 132 reported any IPV exposure.

**IMPLICATIONS OF SELF-REPORTED IPV EXPOSURE AMONG CURRENT SERVING ADF PERSONNEL AND PARTNERS**

Findings from analyses of data from **current serving ADF personnel** are presented in Appendix 4. Consistent with analyses of transitioned veterans, self-reports of IPV exposure were associated with a series of mental health, psychosocial and general health outcomes in current serving personnel.

**Mental health**

- Greater PTSD symptoms
- Greater depression symptoms
- Greater anger
- Greater alcohol abuse
- Greater distress.

**Psychosocial**

- Greater suicidality
- Greater sleep disturbance
- Greater aggression
- Greater relationship problems.

**Health**

- Greater pain
- More health issues
- Poor general health.

Findings from analyses of data from the partners of **current serving ADF personnel** are presented in Appendix 4. Consistent with results for partners of transitioned veterans, reports of IPV exposure among partners of current serving ADF personnel were associated with:

- Greater PTSD symptoms
- Greater distress
- Greater suicidality
- Greater relationship problems
- Poor general health.

## Stage 2

The findings presented above identified some strong and important associations with self-reported IPV exposure, which were the focus of further in-depth exploration in Stage 2. Given the larger sample size available for analyses, these were focussed only on data from transitioned personnel and considered associations with self-reported IPV exposure and (1) suicidality, and (2) PTSD symptoms.

### IPV exposure and suicidality

A series of in-depth analyses were conducted to further explore the associations observed between reports of **IPV exposure and suicidality** among recently transitioned personnel.

First, the overall analyses of the association with self-reported IPV exposure and any suicidality (including any ideation, plans, or attempts) were repeated separately for men and women, in order to examine the possibility of gender differences in the magnitude of implications of IPV. These analyses are presented in Table 4.4 and indicated that reports of IPV exposure were significantly associated with substantial increases in the risk of suicidality among both women (OR = 2.59) and men (OR = 3.80). A comparison of OR estimates was trending towards higher values (suggesting stronger links) among men, when compared to women. However, the 95% CIs for these point estimates were overlapping and this indicates that the difference was not statistically significant (p >0.05), and associations with IPV exposure and suicide risk were positive and large among both men and women.

Table 4.4. Logistic regressions for the effect of self-reported IPV exposure on any suicidality amongst recently transitioned personnel, stratified by gender.

| | Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | Any IPV | | OR | 95% CI | | p |
| | n | % | | LB | UB | |
| **Suicidality, Women** | | | | | | |
| No | 71 | 24.7 | | | | |
| Yes | 46 | 46.0 | 2.59 | 1.61 | 4.18 | <0.001 |
| **Suicidality, Men** | | | | | | |
| No | 383 | 21.0 | | | | |
| Yes | 330 | 50.3 | 3.80 | 3.14 | 4.60 | <0.001 |

Second, a series of analyses were conducted to benchmark the strength of the association between self-reported IPV exposure and any suicidality, relative to other forms of lifetime trauma and military trauma that have recognised impacts on mental health. The findings from these analyses are presented in Table 4.5 (for lifetime traumatic events) and Table 4.6 (for military-related trauma). As shown, there were 45.3% of transitioned personnel who reported exposure to IPV and also reported any suicidality. This reflected a 3.6-fold increase relative to veterans who did not report IPV exposure. This association was notably larger than the OR observed for any other lifetime traumatic event (Table 4.5), with the next largest effect being for reports of sexual assault or molestation, which was associated with a near three-fold increase in the risk of suicidality. In relation to military traumas, Table 4.6 shows the second largest association with any suicidality (after IPV exposure) was with reports of witnessing human degradation (OR = 2.16), while other exposures were also associated with relatively modest increases in the risk of any suicidality.

Table 4.5. Conditional rates of any suicidality among recently transitioned personnel and associations with self-reports of any IPV exposure compared to other lifetime traumatic events.

| | Conditional % (Suicidality positive) | OR |
|---|---|---|
| **Any IPV Exposure** | 376 (45.3) | 3.61 |
| **Other lifetime potentially traumatic events (PTEs)** | | |
| Life threatening automobile accident | 183 (37.5) | 1.87 |
| Other life-threatening accident | 219 (44.8) | 2.81 |
| Major natural disaster | 183 (33.3) | 1.50 |
| Life-threatening illness | 104 (35.0) | 1.57 |
| Mugged, held up or threatened with a weapon | 211 (40.7) | 2.21 |
| Sexual assault or molestation | 122 (49.0) | 2.98 |
| Someone close died unexpectedly | 329 (34.6) | 1.68 |
| Child had a life-threatening illness or injury | 61 (34.9) | 1.54 |
| Anyone close to you had an extremely traumatic experience (e.g. kidnapped, raped) | 94 (43.3) | 2.27 |
| Witnessed someone being badly injured or killed, or unexpectedly saw a dead body | 468 (36.3) | 2.33 |

Table 4.6. Conditional rates of suicidality among recently transitioned personnel and associations with self-reports of any IPV exposure compared to other military traumas.

| | Conditional % (PTSD positive) | OR |
|---|---|---|
| **Any IPV Exposure** | 376 (45.3) | 3.61 |
| **Other potentially traumatic deployment exposures** | | |
| Seriously fear you would encounter an IED | 417 (32.8) | 1.68 |
| Go on combat patrols | 428 (31.7) | 1.50 |
| Concerned about yourself or others (including allies) having an unauthorised discharge of a weapon | 490 (32.7) | 1.78 |
| Clear or search buildings, caves, vessel, etc. | 340 (35.8) | 1.89 |
| Come under fire | 432 (31.7) | 1.55 |
| In danger of being killed or injured | 555 (32.2) | 1.91 |
| Have casualties among people close to you | 467 (34.3) | 1.94 |
| Handle or see dead bodies | 483 (35.1) | 2.12 |
| Witness human degradation and misery on a large scale | 455 (35.8) | 2.16 |
| Discharge your weapon in direct combat | 157 (38.8) | 1.88 |

A third set of additional analyses were conducted to explore whether associations with self-reports of IPV and suicidality varied according to the nature of exposure to emotional versus physical forms of violence. For purposes of these analyses, exposure to sexual IPV was considered as a type of physical IPV (given small numbers), and the different forms of violence were categorised into four groups: (1) No IPV exposure (*n* = 2056, 71.1%); (2) Exposure to emotional IPV alone (*n* = 548,

18.9%); (3) Exposure to physical IPV alone (*n* = 68, 2.4%); and (4) Exposure to combined emotional and physical IPV (*n* = 221, 7.6%). This grouping factor was treated as an explanatory variable in a logistic regression model in which any suicidality was the outcome. The findings from these analyses are presented in Table 4.7, which indicates that reports of all forms of IPV were significantly and strongly associated with suicidality, when compared to no exposure. There was a trend towards larger OR estimates given exposure to combined emotional and physical IPV, and physical IPV alone, which were both associated with five-fold increases in the risk of any suicidality. However, the association of reported exposure with emotional IPV alone was still large and significant, and suggested a three-fold increase in suicide risk.

Table 4.7. Self-reports of emotional IPV, physical IPV and combined emotional and physical IPV as predictors of any suicidality among transitioned personnel.

| | **Frequencies** | | **Logistic Regression** | | | |
|---|---|---|---|---|---|---|
| | **Any suicidality** | | **OR** | **95% CI** | | **p** |
| | **n** | **%** | | **LB** | **UB** | |
| **IPV categories** | | | | | | |
| No emotional or physical IPV (referent) | 380 | 18.6 | | | | |
| Emotional IPV alone | 223 | 40.8 | 3.01 | 2.45 | 3.69 | <0.001 |
| Physical IPV alone | 34 | 50.7 | 4.62 | 2.82 | 7.62 | <0.001 |
| Combined emotional and physical IPV exposure | 120 | 54.3 | 5.17 | 3.88 | 6.91 | <0.001 |

## IPV exposure and PTSD symptoms

A series of in-depth analyses were also conducted to further explore the association observed between self-reported IPV exposure and PTSD symptoms among recently transitioned personnel.

First, the overall analyses of this association were repeated separately for men and women, to again examine the possibility of gender differences in the mental health implications of IPV. These analyses are presented in Table 4.8 which indicated that reports of IPV exposure were significantly associated with a substantially increased risk of probable PTSD among both women (OR = 4.16) and men (OR = 3.76). Thus, the OR was higher among women compared to men, but in both instances the effects were approaching a four-fold increase in risk of probable PTSD among those who reported exposure to IPV. The 95% CIs were overlapping, indicating that the difference was not statistically significant.

Table 4.8. Logistic regressions for the effect of IPV exposure on probable PTSD amongst recently transitioned personnel stratified by gender.

| | **Frequencies** | | **Logistic Regression** | | | |
|---|---|---|---|---|---|---|
| | **Any IPV** | | **OR** | **95% CI** | | **p** |
| | **n** | **%** | | **LB** | **UB** | |
| **PCL >30, Women** | | | | | | |
| No | 50 | 19.8 | | | | |
| Yes | 67 | 50.8 | 4.16 | 2.64 | 6.64 | <0.001 |
| **PCL >30, Men** | | | | | | |
| No | 288 | 18.5 | | | | |
| Yes | 414 | 46.0 | 3.76 | 3.13 | 4.52 | <0.001 |

Second, a series of analyses were conducted to benchmark the association with self-reported IPV exposure and probable PTSD, relative to other forms of lifetime and military trauma that have recognised impacts on posttraumatic mental health. The findings from these analyses are presented in Table 4.8 (for lifetime traumatic events) and Table 4.9 (for military-related traumas). As shown, there were 58.7% of transitioned personnel who reported exposure to IPV and also reported probable PTSD. This reflected a 3.8-fold increase relative to veterans who did not report IPV exposure. The association was larger than the OR observed for any other lifetime traumatic event (Table 4.9), with the next largest OR for having witnessed someone being badly injured or killed (or unexpectedly seeing a dead body), which was associated with a 3.1-fold increase in the risk of probable PTSD. In relation to military traumas, Table 4.10 shows a comparably large association with having discharged a weapon in direct combat (OR = 3.96), while other exposures were associated with relatively modest increases in probable PTSD, compared to the OR for self-reported IPV exposure.

Table 4.9. Conditional rates of PTSD among recently transitioned personnel and associations with any self-reported IPV exposure compared to other lifetime traumatic events.

| | Conditional % (PTSD positive) | OR |
|---|---|---|
| **Any IPV Exposure** | 481 (58.7) | 3.8 |
| **Other lifetime potentially traumatic events (PTEs)** | | |
| Life threatening automobile accident | 235 (48.7) | 1.83 |
| Other life-threatening accident | 281 (58.5) | 3.06 |
| Major natural disaster | 274 (50.8) | 2.09 |
| Life-threatening illness | 142 (48.3) | 1.76 |
| Mugged, held up or threatened with a weapon | 293 (57.2) | 2.79 |
| Sexual assault or molestation | 147 (59.8) | 2.67 |
| Someone close died unexpectedly | 493 (52.2) | 2.62 |
| Child had a life-threatening illness or injury | 81 (46.0) | 1.56 |
| Anyone close to you had an extremely traumatic experience (e.g. kidnapped, raped) | 127 (59.3) | 2.67 |
| Witnessed someone being badly injured or killed, or unexpectedly saw a dead body | 659 (51.6) | 3.11 |

Table 4.10. Conditional rates of PTSD among recently transitioned personnel and associations with any IPV exposure compared to other military traumas.

| | Conditional % (PTSD positive) | OR |
|---|---|---|
| **Any IPV Exposure** | 481 (58.7) | 3.8 |
| **Other potentially traumatic deployment exposures** | | |
| Seriously fear you would encounter an IED | 619 (50.7) | 2.78 |
| Go on combat patrols | 636 (49.0) | 2.57 |
| Concerned about yourself or others (including allies) having an unauthorised discharge of a weapon | 690 (48.4) | 2.61 |
| Clear or search buildings, caves, vessel, etc. | 495 (54.9) | 2.99 |
| Come under fire | 625 (47.9) | 2.31 |
| In danger of being killed or injured | 802 (48.5) | 3.19 |

| | | |
|---|---|---|
| Have casualties among people close to you | 678 (52.2) | 3.23 |
| Handle or see dead bodies | 689 (52.2) | 3.29 |
| Witness human degradation and misery on a large scale | 654 (53.8) | 3.47 |
| Discharge your weapon in direct combat | 250 (64.4) | 3.96 |

Given the particularly strong associations and conceptual links with IPV exposure (as a major form of potential trauma) and posttraumatic stress, a series of further analyses were also conducted to examine whether IPV was uniquely associated with probable PTSD, when controlling for the effects of other traumatic events. Table 4.11 displays the results of these multiple regression analyses, which indicated that self-reported IPV exposure remained significantly and strongly associated with probable PTSD, when controlling for aggregate measures of lifetime traumatic events and military trauma exposure respectively.

Table 4.11. Multiple logistic regression models among recently transitioned personnel, indicating the associations with self-reported IPV exposure and probable PTSD (PCL >30 cut-off) when adjusting for the number of lifetime traumatic events and number of military trauma exposures.

| | **PCL >30 Frequencies** | | **Logistic regression models** | | | |
|---|---|---|---|---|---|---|
| | | | | **95% CI** | | **p** |
| | **n** | **%** | **OR** | **LB** | **UB** | |
| **IPV Exposure** | 481 | 46.60 | 3.24 | 2.69 | 3.90 | <0.001 |
| **Number of General Traumatic Exposures** (M,SD) | 4.98 | 3.31 | 1.38 | 1.34 | 1.43 | <0.001 |
| | | | | | | |
| **IPV Exposure** | 481 | 46.60 | 3.81 | 3.12 | 4.59 | <0.001 |
| **Military Traumatic Exposures** (M,SD) | 6.06 | 4.05 | 1.22 | 1.19 | 1.25 | <0.001 |

A third set of additional analyses were also conducted to explore whether associations with self-reported IPV and probable PTSD varied according to the nature of exposure to emotional versus physical forms of violence. For purposes of these analyses, exposure to sexual IPV was considered as a type of physical IPV (given small numbers). The different forms of violence were also categorised into four groups: (1) No IPV exposure (*n* = 2056, 71.1%); (2) Exposure to emotional IPV alone (*n* = 548, 18.9%); (3) Exposure to physical IPV alone (*n* = 68, 2.4%); and (4) Exposure to combined emotional and physical IPV (*n* = 221, 7.6%). This four-level variable was treated as an explanatory variable in a logistic regression model where probable PTSD was the outcome. The findings from these analyses are presented in Table 4.12, which indicates that all forms of self-reported IPV were significantly and strongly associated with probable PTSD, when compared to no exposure. There was a trend towards a larger OR estimate given reported exposure to combined emotional and physical IPV, which was associated with a 4.5-fold increase in the risk of probable PTSD. However, the associations with reports of exposures to emotional IPV alone and physical IPV alone were large and comparable, and suggested greater than 3.5-fold increases in the risk of probable PTSD.

Table 4.12. Comparison of self-reported emotional abuse, physical abuse, and combined emotional and physical abuse as predictors of probable PTSD in transitioned military personnel.

| | Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | PCL >30 | | OR | 95% CI | | p |
| | n | % | | LB | UB | |
| **IPV categories** | | | | | | |
| No emotional or physical IPV (referent) | 552 | 27.2 | | | | |
| Emotional IPV alone | 309 | 57.4 | 3.64 | 2.99 | 4.44 | <0.001 |
| Physical IPV alone | 37 | 54.4 | 3.30 | 2.02 | 5.42 | <0.001 |
| Emotional and physical IPV | 136 | 62.4 | 4.44 | 3.32 | 5.95 | <0.001 |

Finally, a series of **moderation** analyses were conducted to examine factors that might be associated with a stronger or weaker relationship between self-reported IPV exposure and PTSD symptoms. That is, for some sub-groups of veterans there may either be stronger or weaker associations between IPV exposure and PTSD symptoms, and these could suggest factors that may protect or 'buffer' against the adverse impacts of IPV. Box 4 provides a high-level summary of key findings from these analyses, while further statistical details are presented in Appendix 5. The moderator variables

**BOX 4: Moderation Analyses**

Moderation analyses suggested that the relationship between self-reported IPV exposure and PTSD symptoms among transitioned veterans varied across levels of several variables (see Appendix 6 for details).

These indicated that the association between self-reported IPV exposure and probable PTSD was stronger in the context of:

- Other stressful life events
- Other lifetime trauma exposure
- High economic instability.

The analyses also indicated that the association between self-reported IPV exposure and probable PTSD was weaker in the context of:

- High social support from friends.

There was also a marginally significant (p = 0.06) moderating effect of social support from family, such that greater social support was associated with a weaker IPV and PTSD symptom relationship. There was no moderating effect of having children on the relationship between self-reported IPV and probable PTSD.

By way of illustration of such findings, the detailed results in Appendix 5 indicate that with regards to social support, every one-point increase in scores on the scale measuring social support from friends was associated with a 0.86-point *smaller* effect of self-reported IPV on PTSD symptoms. Therefore, greater social support from friends was possibly associated with a reduced effect of IPV on PTSD symptoms. Conversely, a one-point increase on the economic instability scale was associated with a 2.44-point *increase* in the strength of association of self-reported IPV with PTSD symptoms.

were selected based on preliminary evidence and logic which are also described in Appendix 6.

# Part 5 – IPV Exposure and Help Seeking

**KEY POINTS**

- Among transitioned personnel and partners, self-reported IPV exposure was associated with significantly increased rates of seeking assistance for mental health.
- More than 90% of transitioned personnel and partners who reported exposure to IPV also reported having visited any health provider in the past year.
- Among transitioned personnel who reported IPV exposure, the most common providers of mental health support were GPs/Medical Officers, psychologists and psychiatrists.
- Common presenting problems reported by individuals who reported exposure to IPV and presenting for mental health support included depression, anxiety, relationship problems and sleep problems.
- Among transitioned personnel who reported IPV exposure, more than 85% reported having visited a GP in the past year for their own health, while more than half reported having visited specialist doctors or dental professionals.
- The most common resources that transitioned personnel who reported IPV exposure used to inform or assess their mental health included the DVA website, social media and ex-service organisations.

## Overview

This section reports analyses which address the fifth aim of this project, which was to:

5. Describe the help-seeking behaviours and patterns of recently transitioned ADF personnel and partners who report exposure to IPV.

The initial analyses addressing this aim considered associations between self-reported IPV exposure and reports of help-seeking. They examined whether transitioned personnel and their partners who reported IPV had a disproportionate likelihood of using and being encountered in different health service contexts.

Subsequent descriptive analyses were then conducted to profile the help-seeking behaviours of individuals who reported IPV exposure. These indicated services most commonly used by transitioned members who reported IPV exposure (there was less information about help-seeking collected from partners), and thus suggest potential contexts for initiatives that can help to address IPV.

## Findings

Table 5.1A presents findings from logistic regression models which considered self-reports of any IPV exposure as an explanatory factor for help seeking among **recently transitioned personnel**. As shown, relative to those who did not report exposure, transitioned personnel who reported IPV were significantly more likely to report:

- **Concern about mental health**: Transitioned personnel who reported IPV exposure demonstrated a 2.8-fold increase in the likelihood of recognising and reporting concern about their mental health.
- **Any assistance for mental health**: Transitioned personnel who reported IPV exposure demonstrated a 2.3-fold increase in the likelihood of reporting having ever had assistance for mental health.
- **Recent assistance for mental health**: Transitioned personnel who reported IPV exposure demonstrated a 2.4-fold increase in the likelihood of reporting having had assistance for mental health in the past year.
- **Recent visits to any health professional**: Transitioned personnel who reported IPV exposure demonstrated a 1.4-fold increase in the likelihood of reporting having visited any health professional in the past year.

The final association with self-reported IPV exposure and visits to any health professional was modest in size relative to links with usage of mental health services. However, these differences should be viewed in relation to higher overall numbers of participants who reported visits to any health professional. That is, 93.2% of recently transitioned members who reported exposure to IPV also reported visits to any health professional in the last year (relative to 90.8% among those who did not report IPV). This was compared to 40.7% of members who reported exposure to IPV who had also sought assistance for mental health in the last year (relative to 21.7% among those who did not report IPV exposure).

Table 5.1B presents findings from regression models which considered any self-reported IPV exposure as an explanatory factor and statistical predictor of help seeking among **partners** of recently transitioned personnel. These show that while reports of IPV exposure were associated with an increased likelihood of having ever been concerned about mental health, there were no significant links with reports of assistance for these problems (the question about visits to any health professional was not asked of partners). These associations should also be viewed in the context of similar absolute levels of mental health help-seeking among partners, relative to transitioned personnel who reported IPV exposure. For example, 44% of partners reported IPV exposure and also sought assistance for mental health in the last year, relative to mental health help-seeking rates of 40.7% among transitioned personnel who reported exposure. The absence of significant links with mental health help-seeking among partners was thus attributed to higher rates of mental health help seeking among partners who reported no IPV exposure, relative to transitioned personnel who reported no IPV exposure.

Table 5.1A. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **help seeking behaviours** among recently transitioned personnel.

| | **No IPV (n = 2027)** | | **Any IPV (n = 825)** | | **Logistic regression models** | | | |
|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **OR** | **95% CI** | | **p** |
| | | | | | | **LB** | **UB** | |
| **Ever been concerned about mental health** | 1189 | 58.7 | 662 | 80.2 | 2.84 | 2.35 | 3.45 | <0.001 |
| **Ever had assistance for mental health** | 979 | 48.3 | 566 | 68.6 | 2.34 | 1.98 | 2.78 | <0.001 |
| **Assistance for mental health in the last 12 months** | 439 | 21.7 | 336 | 40.7 | 2.43 | 2.05 | 2.89 | <0.001 |
| **Visited any health professional for your own health in the last 12 months** | 1833 | 90.8 | 771 | 93.2 | 1.43 | 1.06 | 1.97 | 0.02 |

Table 5.1B. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of help seeking behaviours among **partners** of transitioned personnel.

| | No IPV (n = 158) | | Any IPV (n = 132) | | Logistic regression models | | | |
|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | OR | 95% CI | | p |
| | | | | | | LB | UB | |
| **Ever been concerned about mental health** | 67 | 43.5 | 76 | 58.9 | 1.86 | 1.16 | 2.99 | 0.01 |
| **Ever had assistance for mental health** | 52 | 81.3 | 58 | 77.3 | 0.79 | 0.34 | 1.80 | 0.57 |
| **Assistance for mental health in the past 12 months** | 21 | 32.8 | 33 | 44.0 | 1.61 | 0.80 | 3.22 | 0.18 |

In the context of substantial engagement of transitioned personnel with health and mental health services, a series of descriptive analyses were conducted to profile the typical patterns of help-seeking, and thus points of contact with the service system. Relevant questions about help-seeking were not asked of partners and the findings presented thus relate to transitioned personnel only.

Among transitioned personnel who reported having sought assistance for mental health in the past 12 months, questions were asked about the nature of services accessed, as well as both primary and secondary problems that led to them seeking care. Table 5.2 displays the findings from these descriptive analyses, which indicated that among personnel who reported exposure to IPV:

- The most common providers of mental health support were: (1) **GPs/Medical Officers**; (2) **psychologists**; and (3) **psychiatrists**.
- The three most common primary problems when presenting for mental health support were: (1) **depression**; (2) **relationship problems**; and (3) **anxiety**.
- Commonly self-reported secondary reasons for seeking care were anxiety, sleep problems, depression and anger.

Second, among transitioned personnel who reported having visited **any health professional**, there were comparable questions asked about the nature of services accessed and relevant findings are presented in Table 5.3. As shown, there were more than 85% of transitioned personnel who reported exposure to IPV who had **visited a GP** in the past year, while more than half reported visiting **specialist doctors** or **dentists/dental professionals**. In comparison, there were around one third of personnel who reported exposure to IPV and also reported having seen a psychologist. There were similar rates of visitation for physiotherapists/hydrotherapists and day clinics for minor surgery or diagnostic tests. There were less frequent reports of visiting other health providers.

Table 5.2. Descriptive analyses of **mental health help seeking** and presenting problems among recently transitioned personnel who reported any IPV exposure in the current relationship.

| | n | %[1] |
|---|---|---|
| **Sought/received help from specific providers for mental health problems** | | |
| Last 12 months | | |
| GP/Medical Officer | 216 | 65.3 |
| Psychologist | 187 | 57.7 |
| Psychiatrist | 165 | 50.8 |
| Other MH Professional | 65 | 20.2 |
| Other Provider | 37 | 11.4 |
| Inpatient treatment | 34 | 10.5 |
| Hospital based PTSD program | 17 | 5.3 |
| Alcohol/drug program | 3 | 10.9 |
| **What problems led you to seeking care** | | |
| Primary reason[2] | | |
| Depression | 97 | 29.3 |
| Relationship problems | 43 | 13.0 |
| Anxiety | 49 | 14.8 |
| Anger | 47 | 14.2 |
| Problems at work | 24 | 7.3 |
| Sleep | 12 | 3.6 |
| Nightmares | 15 | 4.5 |
| Pain | 17 | 5.1 |
| Alcohol or other drug problems | 6 | 1.5 |
| Gambling | 0 | 0.0 |
| Other | 22 | 6.6 |
| Secondary reasons[2] | | |
| Anxiety | 154 | 46.4 |
| Sleep | 147 | 44.3 |
| Depression | 129 | 38.9 |
| Anger | 127 | 38.3 |
| Relationship problems | 105 | 31.7 |
| Nightmares | 83 | 25.0 |
| Problems at work | 70 | 21.1 |
| Pain | 67 | 20.2 |
| Alcohol or other drug problems | 57 | 17.2 |
| Gambling | 6 | 1.8 |
| Other | 16 | 4.8 |

[1] Note: Denominator for the percentages is the subset of the sample who reported seeking help in the last 12 months and experiencing IPV (*n* range = 324-331, depending on the completeness of the outcome reported). [2] Note: Participants were asked to provide a primary reason for seeking help, and, if applicable, any further secondary reasons for seeking help.

Table 5.3. Descriptive analyses of help-seeking from **any health professional** among recently transitioned personnel who reported any IPV exposure in the current relationship.

| | n | %[1] |
|---|---|---|
| **Visited health professionals for own health in the last 12 months** | | |
| General practitioner | 721 | 88.0 |
| Specialist doctor | 436 | 56.8 |
| Dentist or dental professional | 427 | 56.0 |
| Day clinic for minor surgery or diagnostic tests other than x-ray | 283 | 37.8 |
| Physiotherapist/hydrotherapist | 260 | 35.8 |
| Psychologist | 241 | 33.3 |
| Outpatients section of a hospital | 139 | 18.7 |
| Chiropractor | 134 | 19.2 |
| Audiologist/Audiometrist | 137 | 19.7 |
| Casualty or emergency ward | 132 | 17.9 |
| Accredited counsellor | 113 | 16.2 |
| Social worker/welfare officer | 60 | 8.8 |
| Dietician/Nutritionist | 51 | 7.5 |
| Naturopath | 35 | 5.1 |
| Osteopath | 30 | 4.4 |
| Diabetes educator | 21 | 3.1 |
| Alcohol or drug worker | 10 | 1.5 |
| Other | 70 | 12.7 |

[1] Note: Denominator for the percentages is the total sample who responded to the question including those who did not seek help.

Finally, there were a series of questions asked of all transitioned personnel (not just those who had accessed services), as well as partners, regarding resources they had used to inform or assess their mental health in the last 12 months. Table 5.4 presents findings from descriptive analyses of responses to these questions as provided by recently transitioned personnel who reported IPV exposure. As shown, the most common resources used by transitioned veterans were the DVA website (used by 30.4% of veterans), social media (23.1%), and ex-service organisations (17.4%). In contrast, many of the alternative resources were considered infrequently by transitioned personnel who reported IPV exposure.

Findings from analyses of partner responses are not displayed but indicated very low levels of usage of the above listed resources. The only resource that was used more than 10% of partners who reported exposure to IPV was the Beyond Blue website (used by 11.6% of these respondents).

Table 5.4. Descriptive analyses of **mental health resources** used by recently transitioned personnel who reported any IPV exposure in current relationship.

| | n | %[1] |
|---|---|---|
| **Resources used to inform/assess their mental health in the past 12 months** | | |
| DVA website | 253 | 30.4 |
| Social media (i.e. Facebook, Twitter) | 192 | 23.1 |
| An ex-service organisation | 145 | 17.4 |
| ADF website | 113 | 13.6 |
| VVCS Vetline | 113 | 13.6 |
| Beyond Blue website | 91 | 10.9 |
| Other health website | 73 | 8.8 |
| PTSD Coach Australia smart phone app | 57 | 6.9 |
| Black Dog Institute website | 47 | 5.6 |
| Email subscriptions/mailing list | 45 | 5.4 |
| A self-help group | 43 | 5.2 |
| Other smart phone app (mobile phone application) | 39 | 4.7 |
| Men's Helpline website | 29 | 3.5 |
| Blogs | 29 | 3.5 |
| HeadSpace website | 22 | 2.6 |
| At Ease website | 21 | 2.5 |
| Kids Helpline website | 19 | 1.1 |
| On Track smart phone app | 18 | 2.2 |
| Defence Family Helpline | 18 | 2.2 |
| Other helpline | 18 | 2.2 |
| Other treatment | 18 | 2.2 |
| Lifeline website | 15 | 1.8 |
| Relationships Australia helpline | 14 | 1.7 |
| 1800 IMSICK | 13 | 1.6 |
| MoodGYM internet treatment | 10 | 1.2 |
| Mensline | 10 | 1.2 |
| Lifeline | 8 | 1.0 |
| Mindhealthconnect website | 8 | 1.1 |
| E-couch internet treatment | 8 | 1.1 |
| ADF All-hours Support | 8 | 1.1 |
| SANE Australia helpline | 7 | 0.8 |
| Mindspot clinic helpline | 7 | 0.8 |

[1] Note: Denominator for the percentages is the total sample including those who did not seek help.

# Part 6 – IPV Use among Transitioned Veterans

**KEY POINTS**

- These analyses are based on data from n = 266 couples in which veteran surveys were linked with partner reports of IPV exposure, and thus provide information regarding the presumed use of IPV by recently transitioned ADF personnel.
- There were 46.1% of all couples who identified any use of IPV by the veteran (which was mainly emotional IPV only), and in around half of these cases the veteran also reported use of IPV by their partner.
- Risk and protective factors for presumed IPV use among transitioned personnel included factors linked to unemployment and income, financial status, trauma exposure and social resources (which reduced the risk of presumed IPV use).
- Transitioned personnel who were identified as using IPV demonstrated complex mental health profiles, which were reflected in very high rates of harmful drinking, suicidal ideation, probable PTSD and depression.
- Transitioned personnel who were identified as using IPV also reported high rates of accessing mental health services and other health professionals.
- More than 90% of these personnel reported having visited a GP in the past year, while more than 50% had visited dental professionals and one third had visited a psychologist.

## Overview

The final section of findings for this report describes analyses of survey information from n = 266 recently transitioned ADF members that could be linked with data from their partners regarding experiences of IPV exposure. Previous sections have presented analyses of these partner reports of IPV exposure that considered the frequencies of exposure (Part 2), as well as risk and protective factors (Part 3), and associations with health and wellbeing outcomes (Part 4). These analyses were all based on data obtained just from the partners of transitioned personnel in the FWS.

The current section extends these analyses by considering information from surveys of recently transitioned veterans which were linked with partner-reports of IPV exposure for a subset of participants (consent was not provided to match data in all cases). Accordingly, the current analyses are focussed on **couples' data**, and mainly consider veteran-related factors that may relate to partner reports of IPV exposure. For simplicity, the remainder of this section refers to the presumed **use of IPV by transitioned ADF members** (inferred from partner reports of IPV exposure).

The analyses presented in this section address a final series of specific aims, which were to:

1. Describe the frequencies of presumed IPV use by transitioned members, when considered in conjunction with their own reports of IPV exposure.
2. Explore veteran-related risk factors for presumed IPV use among transitioned ADF members.
3. Examine the health and wellbeing profiles of recently transitioned ADF members who were identified as using IPV.

4. Profile the help-seeking behaviours and patterns of use among recently transitioned ADF personnel who were identified as using IPV.

The findings are presented across a series of sub-sections which correspond to the aims listed above.

# Findings

## IPV Frequencies

Initial analyses were conducted to quantify the frequencies of presumed IPV and consider the extent to which one or both partners reported relevant exposures. Table 6.1 presents these findings, which identified less than half of couples that exhibited no IPV reported by either partner. In contrast, there were 24.6% of couples characterised by evidence of the veterans' use of IPV alone, and an additional 21.5% characterised by both partners reporting violence exposure. Thus, there was a combined total of 46.1% of all couples (n = 118) that identified any use of IPV by the veteran. This was primarily emotional IPV only that was reportedly used by the veteran (37.2% of all couples), with a sizable minority of all couples (around 9%) identifying physical only or combined emotional and physical IPV (see Table A.3.10 in Appendix 3 for a breakdown of co-occurring frequencies by IPV subtype). There were around 10% of couples in which the transitioned veteran only reported IPV exposure.

Table 6.1. Frequencies of co-occurring IPV exposure including veteran's and partner's reports.

| | n | % |
|---|---|---|
| **No IPV** | 113 | 44.1 |
| **Transitioned member IPV use only** | 63 | 24.6 |
| **Transitioned member IPV use and exposure** | 55 | 21.5 |
| **Transitioned member IPV exposure only** | 25 | 9.8 |

Notes. There was missing data for nine partners and one veteran (out of n = 266 linked couples). Sample in Table 6.1 comprises 237 women partners and 19 men partners.

## Risk and protective factors for presumed IPV use among veterans

A series of regression models were conducted to examine the risk and protective factors for presumed **IPV use** among veterans. Relative to analyses of risk factors for IPV exposure (see Part 4), there were fewer variables considered in this section owing to the smaller sample size, and limited variability for some measures (as reflected in cell sizes that were too small for meaningful analyses).

In relation to **socio-demographic** and **family-related** factors (Table 6.2), the analyses indicated that presumed IPV use was significantly associated with:

- **Education**: Transitioned personnel who reported their highest education was primary or secondary school demonstrated a 2.7-fold increase in the likelihood of IPV use, relative to those who reported university education.
- **Employment status**: Transitioned personnel who reported being unemployed (including in receipt of disability support pensions) demonstrated a 2.2-fold increase in the likelihood of IPV use, relative to those who were working full-time or part-time.
- **Main source of income**: Transitioned personnel who reported receiving an invalidity service pension or compensation/other demonstrated a 2.2-fold increase in the likelihood of IPV use, relative to those who derived income mainly from wages, salary or their own business.

- **Children**: Transitioned personnel who reported living with their children demonstrated a 2.2-fold increase in the likelihood of IPV use, relative to those who reported no children.

Table 6.2. Bivariate logistic regression models indicating **socio-demographic** and **family-related** risk or protective factors for presumed IPV use among recently transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Age group (years)** | | | | | | |
| 18-37 | 33 | 47.8 | | | | |
| 38-47 | 31 | 44.9 | 0.89 | 0.46 | 1.74 | 0.73 |
| 48-57 | 33 | 45.2 | 0.90 | 0.47 | 1.74 | 0.75 |
| 58+ | 21 | 45.7 | 0.92 | 0.43 | 1.94 | 0.82 |
| **Education** | | | | | | |
| Primary or Secondary school | 23 | 60.5 | 2.71 | 1.25 | 5.87 | 0.01 |
| Certificate or Diploma | 61 | 48.8 | 1.68 | 0.97 | 2.91 | 0.06 |
| University | 34 | 36.2 | | | | |
| **Employment status** | | | | | | |
| Full/part-time paid work | 72 | 42.4 | | | | |
| Unemployed (incl. disability support pension) | 21 | 61.8 | 2.20 | 1.03 | 4.68 | 0.04 |
| Retired | 11 | 39.3 | 0.88 | 0.39 | 1.99 | 0.76 |
| Other (student, unpaid work) | 13 | 56.5 | 1.77 | 0.73 | 4.26 | 0.20 |
| **Main source of income** | | | | | | |
| Wage/salary/own business/partnership | 60 | 41.4 | | | | |
| Age pension or Superannuation | 20 | 40.0 | 0.94 | 0.49 | 1.82 | 0.86 |
| Invalidity service pension or VEA/SRCA/MRCA compensation/other | 37 | 60.7 | 2.18 | 1.19 | 4.02 | <0.01 |
| **Children**[1] | | | | | | |
| No children | 13 | 31.0 | | | | |
| Children live elsewhere | 30 | 46.9 | 1.97 | 0.87 | 4.46 | 0.11 |
| Veteran lives with children | 73 | 50.0 | 2.23 | 1.07 | 4.63 | 0.03 |

[1] Veterans are classified as 'living with children' if children live with the veteran at least 50% of the time.

In relation to **service-related** factors (Table 6.3), the analyses indicated that presumed IPV use was significantly associated with:

- **Rank**: Transitioned personnel who served as NCO/Other ranks demonstrated a 1.9-fold increase in the likelihood of IPV use, relative to those who served as Commissioned Officers.
- **Serving status**: Transitioned personnel who reported being ex-serving demonstrated a 2.1-fold increase in the likelihood of IPV use, relative to those active or inactive reservists.
- **Deployment-related trauma exposures**: Transitioned personnel who reported the highest levels of deployment-related trauma exposure demonstrated a 2.2-fold increase in the likelihood of IPV use, relative to those who reported medium levels of exposure, and a 2.1-fold increase, relative to those who reported low levels of exposure.

Table 6.4 displays findings which indicate no significant associations with **discharge-related** factors and IPV use among transitioned personnel.

Table 6.3. Bivariate logistic regression models indicating **service-related** risk or protective factors for IPV use among recently transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Service** | | | | | | |
| Army | 70 | 47.9 | | | | |
| Navy | 14 | 38.9 | 0.69 | 0.33 | 1.45 | 0.33 |
| Air Force | 34 | 46.6 | 0.95 | 0.54 | 1.66 | 0.85 |
| **Rank** | | | | | | |
| Commissioned Officer | 38 | 37.3 | | | | |
| NCO/Other ranks | 80 | 52.3 | 1.85 | 1.11 | 3.08 | 0.02 |
| **Time served in Regular ADF** | | | | | | |
| <10 years | 36 | 50.0 | | | | |
| 10-19 years | 24 | 50.0 | 1.00 | 0.48 | 2.08 | 1.00 |
| 20+ years | 57 | 42.5 | 0.73 | 0.41 | 1.30 | 0.28 |
| **Serving status** | | | | | | |
| Active or Inactive Reservist | 66 | 39.5 | | | | |
| Ex-Serving | 52 | 57.8 | 2.09 | 1.24 | 3.53 | <0.01 |
| **Traumatic deployment exposures** | | | | | | |
| Very low (<=4) | 25 | 45.5 | 0.58 | 0.28 | 1.19 | 0.14 |
| Low (5-12) | 25 | 40.3 | 0.47 | 0.23 | 0.95 | 0.03 |
| Medium (13-22) | 21 | 39.6 | 0.45 | 0.22 | 0.95 | 0.04 |
| High (23-31) / Very high (32-48) | 39 | 59.1 | | | | |

Table 6.4. Bivariate logistic regression models indicating **discharge-related** predictors of IPV perpetration among recently transitioned personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Years since transitioned**[1] | | | | | | |
| 0-2 | 18 | 46.2 | | | | |
| 3-5 | 33 | 66.0 | 2.26 | 0.96 | 5.35 | 0.06 |
| **Medical separation** | | | | | | |
| No | 93 | 44.5 | | | | |
| Yes | 24 | 51.1 | 1.30 | 0.69 | 2.45 | 0.42 |
| **DVA treatment support since transition (white or gold card holder)** | | | | | | |
| No | 51 | 43.2 | | | | |
| Yes | 67 | 48.2 | 1.22 | 0.75 | 2.00 | 0.42 |
| **Member of any ex-service organisation** | | | | | | |
| No | 61 | 43.3 | | | | |
| Yes | 54 | 48.2 | 1.22 | 0.74 | 2.01 | 0.43 |

[1]Only applies to ex-serving veterans, excludes reserves.

In relation to **psychosocial** factors (Table 6.5), the analyses indicated that presumed IPV use was significantly associated with:

- **Financial status**: Transitioned personnel who described their financial situation in terms of just getting along or poor, demonstrated a 2.4-fold increase in the likelihood of IPV use, relative to those who described their situation as comfortable or prosperous.

Although there were no other significant associations with psychosocial risk factors in Table 6.5, there were several differences which were approaching significance and should be viewed in relation to the smaller sample size for couples, and thus lower levels of statistical power. For example, there was a trend towards higher rates of presumed IPV use among veterans that reported 4+ lifetime trauma exposures (52.6%), relative to those reporting 0-1 exposures (37.7%), and this difference was marginally significant in the context of the smaller sample size (p = 0.07).

Table 6.5. Bivariate logistic regression models indicating **psychosocial** predictors of presumed IPV use among recently transitioned personnel.

| | **IPV Frequencies** | | **Logistic Regression** | | | |
|---|---|---|---|---|---|---|
| | ***n*** | **%** | **OR** | **95% CI** | | **p** |
| | | | | **LB** | **UB** | |
| **Financial problems** | | | | | | |
| Current financial hardship (trouble paying money owed) | | | | | | |
| No | 92 | 43.6 | | | | |
| Yes | 24 | 57.1 | 1.72 | 0.88 | 3.37 | 0.11 |
| **Current financial status** | | | | | | |
| Prosperous/Very comfortable/ Reasonably comfortable | 68 | 39.1 | | | | |
| Just getting along/Poor/Very poor | 49 | 60.5 | 2.39 | 1.39 | 4.09 | <0.01 |
| **Employment instability** | | | | | | |
| Became unemployed or were seeking work unsuccessfully for more than one month in the last 12 months | | | | | | |
| No | 92 | 43.2 | | | | |
| Yes | 25 | 58.1 | 1.83 | 0.94 | 3.55 | 0.08 |
| **Lifetime trauma exposure** | | | | | | |
| 0-1 traumas | 20 | 37.7 | | | | |
| 2-3 traumas | 25 | 37.9 | 1.01 | 0.48 | 2.12 | 0.99 |
| 4+ traumas | 72 | 52.6 | 1.83 | 0.96 | 3.50 | 0.07 |

Table 6.6 presents findings from logistic regression models which examined additional psychosocial factors that were considered as possible risk or protective factors for presumed IPV use among transitioned personnel. These all comprised quasi-continuous measures, rather than categorical or 'grouping' factors, and are thus presented separately to variables considered in Table 6.5. As shown, these results identified significant differences in risk according to:

- **Social support**: Higher levels of social support from both family and friends were associated with lower risk of IPV use. For example, the OR for the association between social support

from family and IPV use (OR = 0.73) is equivalent to the risk of IPV increasing 1.4-fold for each one-point decrease on the social support scale.

- **Negative interactions with family**: Higher levels of negative interactions with family were associated with increased risk of IPV use. Each one-point increase on the negative interactions with family scale was associated with a 1.3-fold increase in the risk of IPV use.
- **Relationship satisfaction**: Higher levels of relationship satisfaction were associated with lower risk of IPV use. The effect size for this association (OR = 0.80) is equivalent to the risk of IPV use increasing 1.3-fold for each one-point decrease on the relationship satisfaction scale.

There was also a significant association observed with having a strong sense of ADF identity and lower risk of presumed IPV use. However, the effect size for this association (OR = 0.92) is equivalent to the risk of IPV use increasing 1.1-fold for each one-point decrease on the ADF identity scale, which is a relatively weak effect.

Table 6.6. Bivariate logistic regression models indicating risk and protective factors for presumed IPV use among recently transitioned personnel.

| | **No IPV** | | **IPV use** | | **Logistic Regression** | | | |
|---|---|---|---|---|---|---|---|---|
| | ***M*** | ***SD*** | ***M*** | ***SD*** | **OR** | **95% CI** | | **p** |
| | | | | | | **LB** | **UB** | |
| **Social interactions** | | | | | | | | |
| Family | | | | | | | | |
| Affective support | 5.47 | 0.96 | 5.10 | 1.24 | 0.73 | 0.58 | 0.92 | <0.01 |
| Negative interactions | 3.80 | 1.97 | 4.75 | 2.10 | 1.26 | 1.11 | 1.43 | <0.001 |
| Friends | | | | | | | | |
| Affective support | 4.23 | 1.60 | 3.66 | 1.56 | 0.80 | 0.68 | 0.93 | <0.01 |
| Negative interactions | 2.17 | 1.60 | 2.23 | 1.83 | 1.02 | 0.88 | 1.18 | 0.78 |
| **Relationship satisfaction** | 8.32 | 1.82 | 7.36 | 2.30 | 0.80 | 0.70 | 0.90 | <0.001 |
| **ADF sense of identity** | 13.71 | 3.97 | 12.38 | 4.26 | 0.92 | 0.87 | 0.98 | 0.01 |

## Health and Wellbeing Profiles

Regression analyses were also conducted to provide an overview of the health and wellbeing profiles of transitioned veterans who were identified as using IPV. These considered IPV use as a predictor across bivariate (unadjusted) models which considered outcome variables including mental health, wellbeing and physical health-related characteristics.

Table 6.7 presents regression models indicating mental health and wellbeing factors that may be associated with presumed IPV use among transitioned veterans. As shown, IPV use was significantly and strongly associated with a range of mental health and psychosocial outcomes, with particularly strong associations observed for:

- **Harmful drinking**: Transitioned personnel who were identified as using IPV demonstrated a near three-fold increase in the likelihood of reporting harmful drinking. There were 68.8% of these veterans who were presumed to use IPV who also reported harmful drinking on the AUDIT.

- **Suicidal ideation**: Transitioned personnel who were identified as using IPV demonstrated a 2.8-fold increase in the likelihood of reporting suicidal ideation. There were 62.8% of these veterans who were presumed to use IPV that also reported suicidal ideation.
- **PTSD**: Transitioned personnel who were identified as using IPV demonstrated a 2.5-fold increase in the likelihood of reporting probable PTSD. There were 57.9% of these veterans who were presumed to use IPV who also reported probable PTSD on the PCL-C.
- **Depression**: Transitioned personnel who were identified as using IPV demonstrated a 2.3-fold increase in the likelihood of reporting probable depression. There were 59.3% of transitioned veterans who were presumed to use IPV who also reported probable depression on the PHQ.
- **Problem anger**: Transitioned personnel who were identified as using IPV demonstrated a 2-fold increase in the likelihood of reporting problem anger. There were 58.2% of these veterans who were presumed to use IPV and also reported problem anger on the DAR-5.

Table 6.7. Bivariate logistic regression models indicating presumed IPV use as an explanatory factor for **mental health and psychosocial** outcomes among recently transitioned personnel.

| | **IPV Frequencies** | | **Logistic regression models** | | | |
|---|---|---|---|---|---|---|
| | | | | **95% CI** | | |
| | **n** | **%** | **OR** | **LB** | **UB** | **p** |
| **PTSD** | | | | | | |
| Below PTSD cut-off (PCL-C <30) | 51 | 35.9 | | | | |
| Probable PTSD (PCL-C ≥30) | 66 | 57.9 | 2.45 | 1.48 | 4.07 | <0.001 |
| **Depression** | | | | | | |
| Below depression cut-off (PHQ <10) | 64 | 38.8 | | | | |
| Probable Depression (PHQ ≥10) | 54 | 59.3 | 2.30 | 1.37 | 3.88 | <0.01 |
| **Anxiety** | | | | | | |
| Below anxiety cut-off (GAD <8) | 72 | 42.1 | | | | |
| Probable Anxiety (GAD ≥8) | 45 | 53.6 | 1.59 | 0.94 | 2.68 | 0.09 |
| **Harmful drinking** | | | | | | |
| No harmful drinking (AUDIT <16) | 96 | 42.7 | | | | |
| Harmful drinking (AUDIT ≥16) | 22 | 68.8 | 2.96 | 1.34 | 6.53 | <0.01 |
| **Anger** | | | | | | |
| Below problem anger cut-off (DAR <12) | 72 | 40.7 | | | | |
| Problem anger (DAR ≥12) | 46 | 58.2 | 2.03 | 1.19 | 3.48 | <0.01 |
| **Sleep** | | | | | | |
| No sleep problems | 75 | 41.4 | | | | |
| Sleep problems | 39 | 55.7 | 1.78 | 1.02 | 3.10 | 0.04 |
| **Suicidality** | | | | | | |
| No suicidal ideation | 64 | 37.9 | | | | |
| Suicidal ideation | 54 | 62.8 | 2.77 | 1.62 | 4.73 | <0.001 |

Table 6.8 presents findings from regression models indicating physical health-related factors that may be associated with presumed IPV use among transitioned veterans. As shown, IPV use was significantly and strongly associated with physical health outcomes including:

- **Self-rated health**: Transitioned personnel who were identified as using IPV demonstrated a 2.4-fold increase in the likelihood of reporting fair/poor health. There were 58.8% of these veterans who used presumed IPV and also reported fair/poor health.
- **Medical status**: Transitioned personnel who were identified as using IPV demonstrated a 1.7-fold increase in the likelihood of being classified as medically unfit. There were 54.4% of these veterans who used presumed IPV who were also classified as medically unfit.
- **Fatigue**: Transitioned personnel who were identified as using IPV demonstrated a two-fold increase in the likelihood of reporting fatigue as a specific health complaint. There were 49.7% of these veterans who used presumed IPV and also reported fatigue.

Table 6.8. Bivariate logistic regression models indicating presumed IPV use as an explanatory factor for **physical health outcomes** among recently transitioned personnel.

| | **IPV Frequencies** | | **Logistic regression models** | | | |
|---|---|---|---|---|---|---|
| | | | | **95% CI** | | |
| | **n** | **%** | **OR** | **LB** | **UB** | **p** |
| **Self-rated health** | | | | | | |
| Excellent/Very good/Good | 58 | 37.4 | | | | |
| Fair/Poor | 60 | 58.8 | 2.39 | 1.43 | 3.98 | <0.001 |
| **Medical status** | | | | | | |
| Fit | 72 | 41.1 | | | | |
| Unfit | 43 | 54.4 | 1.71 | 1.00 | 2.92 | 0.05 |
| **Physical health symptoms** | | | | | | |
| Headaches | | | | | | |
| No | 30 | 39.0 | | | | |
| Yes | 82 | 47.7 | 1.43 | 0.83 | 2.47 | 0.20 |
| Fatigue | | | | | | |
| No | 20 | 32.8 | | | | |
| Yes | 94 | 49.7 | 2.03 | 1.11 | 3.72 | 0.02 |
| Joint stiffness | | | | | | |
| No | 38 | 38.0 | | | | |
| Yes | 75 | 50.0 | 1.63 | 0.97 | 2.73 | 0.06 |
| Lower back pain | | | | | | |
| No | 34 | 38.6 | | | | |
| Yes | 79 | 48.8 | 1.51 | 0.89 | 2.56 | 0.13 |
| Any muscle aches | | | | | | |
| No | 35 | 39.8 | | | | |
| Yes | 78 | 48.1 | 1.41 | 0.83 | 2.38 | 0.20 |

## Help-seeking profiles

Table 6.9 presents findings from logistic regression models which considered presumed IPV use as an explanatory factor for reports of help-seeking behaviours among recently transitioned personnel. As shown, relative to those who were not identified as using IPV, transitioned personnel who indicated IPV were significantly more likely to report:

- **Concern about mental health**: Transitioned personnel who were identified as using IPV demonstrated a 2.5-fold increase in the likelihood of recognising and reporting concern about their mental health. There were 83.8% of these veterans who used presumed IPV who also reported concern about their mental health.
- **Any assistance for mental health**: Transitioned personnel who were identified as using IPV demonstrated a 1.7-fold increase in the likelihood of ever having received assistance for their mental health. There were 70.1% of these veterans who used presumed IPV who had ever received assistance for their mental health.

There were no significant associations observed with presumed IPV use and either recent assistance for mental health or recent visits to any health professional. However, there was a trend towards increased rates of recent assistance for mental health among veterans who were identified as using IPV (38.5%), relative to those that did not (27.3%), and this difference was approaching significance (p = 0.06). The descriptive analyses suggested that overall there were more than one in three veterans who were presumed to use IPV and reported having recently sought mental health support.

Table 6.9. Bivariate logistic regression models indicating any presumed IPV use as a predictor of **help-seeking behaviours** among recently transitioned personnel.

| | No IPV (n = 139) | | Any IPV (n = 118) | | Logistic regression models | | | |
|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | OR | 95% CI | | p |
| | | | | | | LB | UB | |
| **Ever been concerned about mental health** | 94 | 67.6 | 98 | 83.8 | 2.47 | 1.35 | 4.53 | <0.01 |
| **Ever had assistance for mental health** | 80 | 57.6 | 82 | 70.1 | 1.73 | 1.03 | 2.90 | 0.04 |
| **Assistance for mental health in the past 12 months** | 38 | 27.3 | 45 | 38.5 | 1.66 | 0.98 | 2.81 | 0.06 |
| **Visited any health professional for your own health in the last 12 months** | 132 | 95.0 | 112 | 94.9 | 0.99 | 0.32 | 3.03 | 0.99 |

In the context of substantial engagement of transitioned personnel who were identified as using IPV with health and mental health services, a series of descriptive analyses were conducted to profile the typical patterns of help-seeking, and thus points of contact with the service system. Among transitioned personnel who reported having sought assistance for mental health in the past 12 months, there were questions asked about the nature of services accessed, as well as both primary and secondary problems that led them to seeking care. Table 6.10 displays the findings from these descriptive analyses, which indicated that among these personnel who reportedly used IPV:

- The most common providers of mental health support were: (1) **psychologists**; (2) **GPs/Medical Officers**; and (3) **psychiatrists**.
- The three most common primary problems when presenting for mental health support were: (1) **depression**; (2) **anxiety;** and (3) **relationship problems**.

- Commonly self-reported secondary reasons for seeking care were anxiety, depression and sleep problems.

Second, among transitioned personnel who reported having visited **any health professionals** in the past 12 months, there were comparable questions asked about the nature of services accessed and relevant findings are presented in Table 6.11. As shown, there were more than 90% of transitioned personnel who were identified as using IPV that had **visited a GP** in the past year, while more than half of these participants also reported visiting **specialist doctors** or **dentists/dental professionals**. By way of comparison, there were around one third of personnel who used presumed IPV that reported having seen a psychologist, and there were similar rates of visitation reported for physiotherapists/hydrotherapists and day clinics for minor surgery or diagnostic tests. There were less frequent reports of visiting other health providers including hospital outpatient sections.

Finally, there were a series of questions asked of all transitioned personnel (not just those who had accessed services) regarding resources they had used to inform or assess their mental health in the last 12 months. Table 6.12 presents findings from descriptive analyses of responses to these questions as provided by recently transitioned personnel who were identified as using IPV. As shown, the most common resources used by these transitioned veterans were the DVA website (used by 28.0% of veterans), ex-service organisations (22.0%), and social media (18.6%). In contrast, many of the alternative resources were considered infrequently by transitioned personnel who were identified as using IPV.

Table 6.10. Descriptive analyses of **mental health help-seeking** among transitioned personnel who have used presumed IPV in their current relationship.

| | n | %[1] |
|---|---|---|
| **Sought/received help from specific providers for mental health problems** | | |
| Last 12 months | | |
| Psychologist | 29 | 35.4 |
| GP/Medical Officer | 26 | 31.7 |
| Psychiatrist | 21 | 25.6 |
| Inpatient treatment | 8 | 9.8 |
| Other Provider | 7 | 8.5 |
| Other MH Professional | 5 | 6.1 |
| Hospital based PTSD program | <5 | <4.9 |
| Alcohol/drug program | <5 | <4.9 |
| **What problems led you to seeking care** | | |
| Primary reason | | |
| Depression | 22 | 26.8 |
| Anxiety | 15 | 18.3 |
| Relationship problems | 12 | 14.6 |
| Anger | 10 | 12.2 |
| Sleep | 5 | 6.1 |
| Nightmares | 5 | 6.1 |
| Alcohol or other drug problems | <5 | <4.9 |
| Pain | <5 | <4.9 |
| Problems at work | <5 | <4.9 |
| Gambling | 0 | 0.0 |
| Other | 6 | 7.3 |
| Secondary reasons | | |
| Anxiety | 37 | 45.1 |
| Depression | 34 | 41.5 |
| Sleep | 34 | 41.5 |
| Relationship problems | 23 | 28.0 |
| Anger | 22 | 26.8 |
| Problems at work | 21 | 25.6 |
| Nightmares | 17 | 20.7 |
| Alcohol or other drug problems | 17 | 20.7 |
| Pain | 14 | 17.1 |
| Gambling | <5 | <4.9 |
| Other | <5 | <4.9 |

[1] Note. Denominator for the percentages includes respondents who sought care for mental health (n=82). [2] Note. Participants were asked to provide a primary reason for seeking help, and, if applicable, any further secondary reasons for seeking help.

Table 6.11. Descriptive analyses of **any health professional** help seeking among transitioned personnel who have used presumed IPV in their current relationship.

| | n | % |
|---|---|---|
| **Visited health professionals for own health in the last 12 months** | | |
| General practitioner | 108 | 91.5 |
| Specialist doctor | 63 | 53.4 |
| Dentist or dental professional | 62 | 52.5 |
| Psychologist | 39 | 33.1 |
| Day clinic for minor surgery or diagnostic tests other than x-ray | 34 | 28.8 |
| Physiotherapist/hydrotherapist | 34 | 28.8 |
| Casualty or emergency ward | 23 | 19.5 |
| Outpatients section of a hospital | 19 | 16.1 |
| Audiologist/Audiometrist | 18 | 15.3 |
| Accredited counsellor | 17 | 14.4 |
| Chiropractor | 14 | 11.9 |
| Social worker/welfare officer | 10 | 8.5 |
| Dietician/Nutritionist | 7 | 5.9 |
| Naturopath | 7 | 5.9 |
| Osteopath | 5 | 4.2 |
| Diabetes educator | 5 | 4.2 |
| Alcohol or drug worker | <5 | <4.0 |
| Other | 14 | 11.9 |
| Average number of health professionals visited last 12 months (mean, SD) | (4.08) | (0.23) |

Table 6.12. Descriptive analyses of **mental health resources** used by transitioned personnel who have used presumed IPV in their current relationship.

| | n | % |
|---|---|---|
| **Resources used to inform/mental health in the past 12 months** | | |
| DVA website | 33 | 28.0 |
| An ex-service organisation | 26 | 22.0 |
| Social media (i.e. Facebook, Twitter) | 22 | 18.6 |
| VVCS Vetline | 14 | 11.9 |
| Beyond Blue website | 13 | 11.0 |
| PTSD Coach Australia smart phone app | 11 | 9.3 |
| ADF website | 10 | 8.5 |
| Email subscriptions/mailing list | 8 | 6.8 |
| Other health website | 8 | 6.8 |
| A self-help group | 7 | 5.9 |
| At Ease website | 6 | 5.1 |
| Black Dog Institute website | 6 | 5.1 |
| Other smart phone app (mobile phone application) | 6 | 5.1 |
| On Track smart phone app | 5 | 4.2 |
| Blogs | 5 | 4.2 |
| HeadSpace website | <5 | <4.0 |
| MoodGYM internet treatment | <5 | <4.0 |
| Mindhealthconnect website | <5 | <4.0 |
| Lifeline website | <5 | <4.0 |
| Other internet treatment | <5 | <4.0 |
| Mens Helpline website | <5 | <4.0 |
| Defence Family Helpline | <5 | <4.0 |
| ADF All-hours Support | <5 | <4.0 |
| 1800 IMSICK | <5 | <4.0 |
| Lifeline | <5 | <4.0 |
| Mensline | <5 | <4.0 |
| Mindspot clinic helpline | <5 | <4.0 |
| Relationships Australia helpline | <5 | <4.0 |
| SANE Australia helpline | <5 | <4.0 |
| Other helpline | <5 | <4.0 |
| Kids Helpline website | 0 | 0.0 |
| E-couch internet treatment | 0 | 0.0 |

# Discussion

This report presents new Australian evidence regarding the extent of presumed IPV, and factors that relate to self-reported exposures among recently transitioned veterans, current serving members, and partners of both transitioned and current serving ADF personnel. There were a range of analyses and findings summarised across the preceding sections, which are discussed below in relation to the overarching aims and research questions.

**1. What are the rates of self-reported IPV exposure among recently transitioned ADF members, and how do these compare to rates reported by current serving personnel?**

Based on large samples of current and former military personnel from Australia, who were all in intimate relationships, the current analyses identified 28.9% of recently transitioned members reported any IPV exposure in their current relationship, with rates of 22.5% observed among current personnel. These equate to more than **one in four** of all recently transitioned ADF members reporting IPV exposure and **one in five** of all current personnel. These overall levels were explained in large part by reports of exposure to emotional IPV, although levels of physical IPV exposure were significant. For example, 26.6% of all transitioned personnel reported exposure to emotional IPV, while 9.7% reported physical IPV exposures. The comparable figures for current personnel were 20.8% and 6.0%, respectively. In contrast, <1.0% of either transitioned or current serving personnel reported exposure to sexual IPV. In terms of community-based comparisons, we are not aware of studies that have considered the IPV measure used in this project in another Australian context. However, the major source of evidence regarding violence is derived from the Personal Safety Survey, conducted by the Australian Bureau of Statistics in 2016 (which was a comparable period for data collection in the MHWTS) [79]. This identified 3.2% of women (2.9% of men) who reported experiencing emotional IPV by a current partner in the last year, while 1.4% of women (0.8% of men) reported exposure to physical violence perpetrated by an intimate partner across the same period [79]. Thus, even based on imperfect comparisons that differ according to reference period (the items used in this project referred to experiences in the current relationship), the results suggest rates of IPV exposure that are elevated among transitioned personnel and current ADF members, relative to non-military populations.

Comparisons can also be conducted with population-based studies of current and former military personnel from international jurisdictions, which were synthesised in a recent systematic review [80]. This review pooled figures from across jurisdictions and settings (including community settings and health services) and identified 24.3% of veterans on average that reported any recent exposure to IPV, along with 13.3% of active-duty personnel. Whilst there is substantial heterogeneity in the measurement of IPV across studies and comparisons should be made carefully, the current findings suggest rates of exposure among Australian veterans that are above international averages (which may reflect in part the focus on transitioned personnel), while larger possible elevations were observed for current serving members. These relative figures, along with high absolute frequencies, strongly suggest that IPV exposure is a major issue among transitioned and current serving military members in Australia, and thus requires significant attention.

There were similar rates of IPV exposure reported by women and men, including among transitioned personnel, for example, where rates of self-reported exposure were 28.7% among men and 30.1% among women. Such findings of ‘gender symmetry’ in IPV rates are inconsistent with findings from

the Personal Safety Survey, as well as so-called 'agency data' (for example, comprising records of specialist violence support services, or police reports), which indicate that IPV is a heavily gendered dynamic perpetrated primarily by men against women [81]. However, similar levels of IPV among men and women are reported in other population surveys [82], and international studies of veterans and current personnel [80]. In part, these findings may be attributed to limitations of survey measures, including items used in the MHWTS. These asked broadly about physical, emotional and sexual IPV, and did not fully address the impacts of violence (e.g. injuries), which are typically greater among women [83, 84], or coercive and controlling behaviours that are also perpetrated mainly by men against women [85]. It is possible the current findings relate instead to heterogeneous forms of violence that reflect diverse motivations and contexts for behaviour. These may include coercive and controlling behaviours, as well as instances of 'situational violence' that do not reflect power and control motivations. The relative frequencies of these different forms of IPV (i.e., coercive and controlling behaviours) cannot be inferred from the current data, given limitations of the emotional IPV items in the WAST, and this highlights the need for additional research exploring the nature and experiences of violence among both men and women veterans, and current serving personnel.

**2. What are the rates of IPV exposure reported by the partners of recently transitioned and current serving ADF members?**

The report also presented findings regarding IPV exposure identified by partners of transitioned and current ADF members, which provide evidence of the likely extent of IPV used by current and former military members in Australia. These identified very high rates of self-reported exposures, with 45.5% of partners of transitioned personnel reporting IPV in their current relationship, while comparable figures were 24.1% among partners of current personnel. These proportions equate to nearly **one in two** among partners of recently transitioned ADF members who report IPV exposure, and nearly **one in four** partners of current personnel. These overall levels were also explained in large part by reports of exposure to emotional IPV, although levels of physical IPV exposure were significant. For example, 43.6% of partners of transitioned personnel reported exposure to emotional IPV, while 9.1% reported exposure to physical IPV. The comparable figures for partners of current personnel were 22.8% (emotional IPV) and 2.4% (physical IPV), respectively. In contrast, 1.4% (0.9%) partners of transitioned (current serving) personnel reported exposure to sexual IPV.

The findings should be viewed in relation to important caveats and limitations of the FWS data. As described above, the IPV measure asked broadly about experiences of physical, emotional and sexual IPV. The data does not necessarily indicate violence that resulted in impacts (e.g. physical or psychological injuries), or occurred in the context of coercive and controlling behaviours. Furthermore, partners were only approached if the 'ADF nominator' agreed for them to be contacted, and the FWS is not fully representative of partners. Finally, there were smaller numbers of partners of transitioned personnel (n = 300) and current serving members (n = 662) that took part in the FWS, relative to the MHWTS. This suggests the data will provide less precise estimates. Accordingly, it may be sensible to view the figures as suggesting approximate levels of true IPV rates, which may include lower values and higher figures. For example, if veterans who used IPV were less likely to agree to have family members contacted to participate in the study (which seems plausible), then this could mean the FWS data provides an underestimate of the true rates of IPV exposure.

Notwithstanding these limitations, the current findings provide Australian-first evidence regarding the likely extent of IPV experienced by partners, and thus used by current or former ADF members. They suggest that these behaviours are common in families of military personnel and occur at high levels in

families of transitioned members, which should thus be recognised as highly vulnerable to the impacts of IPV. We are not aware of any large-scale international studies of partners of current or ex-serving military personnel that provide bases for relevant comparison. However, there are informative studies based on self-reports of IPV use from current and former personnel. Syntheses of these have identified around 32% of veterans report any recent IPV use, while comparable figures are around 5% among current personnel [80]. The estimates produced in this study are also above these international averages, which may be partly due to the consideration of partner reports of IPV exposure in this project, relative to self-reports that may be more susceptible to under-reporting.

**3. What are the risk and protective factors for IPV exposure?**

Part 3 of this report described analyses of potential risk and protective factors for self-reported IPV exposure among transitioned personnel and their partners. The findings of these analyses are summarised in Table 7.1, which also ranks all factors that were significantly associated with presumed IPV in terms of the strength of association, as reflected in the Odds Ratio (OR).

As shown, there were several factors associated with relatively large increases in self-reported IPV rates among partners, and the single largest association was with relationship dissatisfaction. This was measured using a seven-item generic scale, with results indicating that each one-point decrease on the scale (indicating more dissatisfied relationships) was associated with a near seven-fold increase in the risk of reporting IPV exposure. Prior studies have also identified associations with relationship satisfaction and IPV exposure, and reviews of this literature suggest that such links are typically small to moderate in magnitude [86]. Accordingly, the current findings may suggest that relationship dissatisfaction is particularly sensitive to IPV among partners of transitioned personnel and could provide a useful risk marker (or proxy indicator) for exposure in applied settings. Such risk markers could be used as part of multi-tiered identification strategies, and prompt further questioning about violence experiences in service provision contexts where the acceptability of direct enquiries about IPV are uncertain.

Table 7.1 also reflects several discernible clusters of factors that were associated with levels of self-reported IPV exposure among transitioned personnel and partners. These included indicators of:

(1) **Socio-economic disadvantage and financial hardship**: This cluster comprised risk factors associated with increased rates of self-reported IPV and included measures of unemployment and reliance on income from service pensions or compensation (among veterans), as well as direct reports of financial hardship and crises. Among veterans and partners there were relevant associations with reports of IPV exposure and housing instability, while partners demonstrated increased risk of reporting IPV if they described being dependent on the former ADF member for income.
(2) **Social connectivity and resources**: Among veterans these included measures of low social support and high negative social interactions, and for partners they included smaller numbers of close friends, which were all associated with increased levels of self-reported IPV exposure.
(3) **Trauma exposure**: This included reports of greater numbers of lifetime traumas as reported by veterans and partners, as well as deployment-related traumas among veterans.
(4) **Discharge status and engagement with veteran-specific services**: This cluster comprised a loose grouping of factors that included being classified as medically separated, remaining a

reservist (which was associated with reduced risk of reporting IPV), reports of being a DVA client, receiving DVA treatment support, and being a member of an ex-service organisation.

Many of these factors are consistent with major categories of risk and protective factors for IPV that have been identified in broader literature, and have been discussed in relation to multi-level frameworks which encompass (1) neighbourhood and community factors, (2) interpersonal factors and (3) individual factors that are associated with IPV [87]. For example, neighbourhood-level indicators of disadvantage (e.g. high unemployment, low average incomes) have been shown to predict IPV in non-military settings, with associations explained in terms of entrenched gender inequality, increased alcohol outlet density and residential instability, which leads to weaker social ties and community connections [87]. In terms of interpersonal factors, higher levels of social support has been shown to reduce the risk of IPV in non-military populations, although the relationship may be nuanced and differ according to the source of support (with family being the most important provider), and neighborhood disadvantage (with support having modest influences in the context of increasing disadvantage) [88]. Such findings are often interpreted as reflecting the ability of support networks to provide resources that can help individuals leave violent relationships, while reduced network size may be an outcome of coercive and controlling behaviours and efforts to isolate the victim. In relation to individual factors, prior studies of childhood trauma have documented small to moderate associations with IPV exposure in adulthood [89, 90]. Such findings have often been explained in terms of social learning theories, and also in relation to posttraumatic mental health problems, which may lead to individuals being targeted by partners that use violence (although there are multiple pathways linking childhood trauma to later IPV exposure that warrant exploration) [90]. Prior studies of U.S. veterans have identified links with IPV and military trauma exposure (e.g. military sexual trauma), and these studies have also proposed that posttraumatic mental health problems may partly account for increases in vulnerability [91].

Findings from the current project regarding increased risk for self-reported IPV according to being classified as medically separated and engaged with veteran-specific services are unique to the Australian context and have not been described previously to our knowledge. These factors can be positioned at the individual and interpersonal levels, with medical separation and reservist status both presumably reflecting varying levels of underlying psychological and physical health. However, these factors remain important since they provide visible indicators of vulnerable groups that may be targets for IPV interventions, particularly veterans who are medically separated. Similarly, associations with reports of IPV risk and being receiving DVA treatment support will also likely reflect underlying impairments and health conditions, while identifying service contexts where transitioned veterans who are exposed to IPV can be engaged. Findings of increased reports of IPV exposure among members of ex-service organisations may also reflect attempts to access support in the context of IPV and suggest potentially important roles for these organisations in providing assistance to address violence and improve safety and wellbeing.

Table 7.1. Risk factors for IPV exposure in both transitioned veterans and their partners, ranked by the strength of association.

| | ORs | |
|---|---|---|
| | **Veteran** | **Partner** |
| *Relationship (dis)satisfaction | | 6.67 |
| Current financial hardship | | 3.89 |
| Lifetime trauma exposure (4+ traumas) | | 3.71 |
| Main source of income (invalidity service pension or VEA/SRCA/MRCA compensation) | 2.75 | |
| Major financial crisis in last 12 months | 2.69 | |
| Current financial hardship | 2.43 | |
| Number of close friends (0-2) | | 2.23 |
| Employment status (unemployed, incl. disability support pension) | | 2.21 |
| Lifetime trauma exposure (4+ traumas) | 2.18 | |
| Housing instability | 2.06 | |
| Employment status (unemployed, incl. disability support pension) | 2.03 | |
| Medical separation | 1.97 | |
| Children living in the household | 1.91 | |
| DVA client | 1.86 | |
| Traumatic deployment (very high) | 1.84 | |
| Main source of income (partner income) | | 1.80 |
| Housing instability | | 1.69 |
| DVA treatment support since transition | 1.66 | |
| Employment instability | 1.61 | |
| Negative social interactions with family | 1.56 | |
| Household structure (couple living with children) | 1.55 | |
| *(Less) social support from family | 1.49 | |
| *Relationship (dis)satisfaction | 1.47 | |
| Serving status (not a reservist) | 1.47 | |
| Traumatic deployment (high) | 1.47 | |
| Traumatic deployment (medium) | 1.39 | |
| Member of ex-service organisations | 1.34 | |
| Education (Certificate or Diploma) | 1.33 | |
| Lifetime trauma exposure (2-3 traumas) | 1.30 | |
| *(Less) social support from friends | 1.25 | |
| Negative social interactions with friends | 1.14 | |
| Lifetime trauma exposure (2-3 traumas) | | 1.07 |

Note: The ORs for protective factors which were associated with reduced risk of IPV exposure (OR <1.0) have been re-scaled by taking the inverse, so all effect size measures are on an equivalent scale (OR >1.0) and indicate risk factors. Factors that have been re-scaled are identified by *.

**4. What are the mental health, psychosocial and physical health correlates of self-reported IPV exposure, alone and when considered in addition to other forms of trauma?**

The analyses in Part 4 considered associations with self-reported IPV exposure and broad categories of outcomes encompassing domains of mental health, psychosocial adjustment, and physical health. The findings were based on cross-sectional survey data, which are thus unable to distinguish the 'direction' of influence among proposed variables. However, in the context of appropriate caveats and cautious interpretations, the results of such cross-sectional analyses may suggest the likely magnitude and breadth of consequences of IPV, which can further demonstrate the scope of the problem (when defined in terms of impact, as well as frequency) in veteran-specific settings.

**Mental health implications**

There were large positive associations with self-reported IPV exposure and mental health problems, which among veterans included PTSD, depression, distress, anger, and alcohol misuse. Among partners, these included PTSD and psychological distress (there were fewer mental health measures in the FWS that could be considered). The strongest associations were observed with measures of probable PTSD. For example, transitioned personnel who reported IPV exposure demonstrated near four-fold increases in rates of probable PTSD, and this finding suggests that IPV should be viewed as a major form of trauma and an important influence on posttraumatic mental health for veterans. These assertions were supported by in-depth analyses of data from transitioned personnel, which indicated that self-reported IPV exposure was one of the strongest factors associated with PTSD, when compared to other trauma types. We are not aware of any prior research that has considered in-depth the nature of links with IPV exposure and probable PTSD among veterans, and the current study thus provides new evidence of possible influences on posttraumatic mental health of both veterans and partners.

In the context of international studies that have considered factors that may alter the association between IPV exposure and mental health among military personnel [28], the current project considered variables that could strengthen or weaken links with IPV exposure and PTSD symptoms. These were examined in a moderation framework, which provided statistical tests of whether the strength of relationship between self-reported IPV exposure and PTSD varied according to levels of 'third variables'. Previous research has demonstrated consistent findings and relevant influences of social support among Canadian personnel, which was shown to alter the association between IPV and psychological distress, such that there were weaker links observed in the context of high social support [28]. Similar findings were presented in the current project, which also found that social support from friends moderated the association between reports of IPV exposure and PTSD severity. That is, for every point increase on the scale measuring social support, there was a decrease in the strength of association between IPV exposure and PTSD symptoms. Such findings may be interpreted in relation to potential 'buffering' mechanisms, whereby social support can protect those who experience IPV from adverse posttraumatic mental health outcomes.

The analyses also identified other moderating variables and indicated that the association between self-reported IPV exposure and PTSD was *stronger* in the context of lifetime trauma exposure, as well as stressful life events and high economic instability. There have been few studies that have considered characteristics apart from social support that may modify the effects of IPV on mental health, and none have been conducted among current or former military personnel. Findings of moderating effects of lifetime trauma suggest that IPV can interact with other experiences, such that

the addition of IPV exposure in the context of other lifetime trauma further exacerbates negative mental health consequences. Moderating effects of stressful life events and economic instability also suggest that mental health implications of IPV may be further exacerbated by difficult social and economic circumstances.

**Psychosocial implications**

The analyses also identified large positive associations with IPV exposure and measures that were classified together in terms of psychosocial outcomes. Among veterans, IPV was associated with increased reports of suicidality, relationship breakdown, general physical violence, sleep disturbances and self-reports of below average parenting quality. Among partners, there were positive associations with self-reports of IPV exposure, suicidal ideation and unhappy relationships (there were fewer psychosocial measures administered in the FWS that could be considered in these analyses). Such associations were statistically significant in unadjusted models, and also when controlling for effects of basic socio-demographic factors (age, gender and education). They indicate that the likely implications of IPV exposure are discernible across psychosocial domains of functioning and wellbeing, with these effects all contributing to the likely impacts of IPV on individuals, families and communities.

Particularly strong links were observed with reports of IPV exposure and measures of suicidality among both transitioned personnel and partners. In relation to the former, the results suggested a 3.2-fold increase in rates of past year suicidal ideation among transitioned personnel that reported IPV, and a 3.9-fold increase in the likelihood of past year suicide plans or attempts. In-depth analyses also indicated that associations with self-reported IPV exposure and any suicidality were larger than associations with other forms of lifetime and military trauma. Among partners, reports of IPV exposure were associated with a 4.5-fold increase in rates of past year suicidal ideation. Such findings are consistent with international studies of veterans [39], as well as community-based samples with no military history [43], and establish IPV as an important risk factor for suicidality among veterans in the Australian context. They are also aligned with expectations of multiple possible ‘pathways’ through which IPV could influence suicide risk. For example, there is likely to be an important pathway via mental health in which IPV exposures predict increased PTSD and depression, and these symptoms are in turn associated with the risk of suicidality. Furthermore, there are other plausible pathways via social support and economic instability. The former is consistent with observations that coercive control often involves isolating a person from support networks [2], while dimensions of low social connectedness are recognised as major drivers of suicide risk [92]. Limiting access to financial resources is another salient form of controlling behaviour and may have an additional role in linking IPV to suicide risk via economic and life stressors. These may partly function via increased distress and mental health problems in a potential ‘chain’ of interconnected circumstances or events.

There were several in-depth analyses conducted involving associations of interest with self-reported IPV exposure and selected measures of mental health (probable PTSD) and psychosocial adjustment (suicidality), which produced both notable and generally consistent patterns of results. For example, these analyses considered the possibility of gender differences in associations with self-reported IPV exposure and the aforementioned indicators of mental health and psychosocial adjustment. They identified strong positive associations with reports of exposures and probable PTSD among both men and women (with ORs trending towards stronger associations among men), as well as for any suicidality (with ORs trending towards stronger associations among women). Such findings are consistent with studies conducted in other contexts which regularly show that both women and men

experience negative impacts of IPV, although consequences for women are often found to be greater [93]. The current findings suggest that IPV exposures among veterans, which regularly occur in the context of both lifetime and military trauma histories, as well as other psychosocial vulnerabilities (e.g. reduced social support after transitioning out of the military), can have major implications for mental health and adjustment across genders.

These analyses also considered the possibility of varying associations involving probable PTSD and suicidality and different types of exposure to emotional and physical forms of self-reported IPV. These indicated that while the combination of emotional and physical IPV was associated with the greatest increases in risk of probable PTSD and suicidality, emotional IPV exposures alone were also associated with large positive increases in relevant risks. For example, self-reports of emotional IPV exposure alone were associated with a 3.7-fold increase in the risk of probable PTSD, relative to a near 4.5-fold increase in risk associated with combinations of emotional and physical violence. Such findings should be viewed in the context of a historical tendency to focus mainly on the incidence and impacts of physical IPV on victims, with growing numbers of studies showing unique implications of emotional or psychological IPV for those exposed. By way of illustration, Potter et al. [4] analysed data from the WHO Multi-Country Study on Women's Health and Domestic Violence, which also categorized IPV according to reports of physical or psychological IPV exposures alone, or when multiple forms of abuse were combined. Similarly, this study found that while combined exposures to multiple forms of IPV were associated with greatest increases in risk of adverse health-related outcomes, including suicidality, all singular forms of abuse including psychological IPV were uniquely associated with such outcomes. These findings align with an expanding body of literature on the nature and impacts of (non-physical) coercive controlling behaviours [2], which affirm that impacts of emotional violence, which were the most common exposures reported across samples in this project, are critical to recognise and address.

**Physical health implications**

The final analyses in Part 4 demonstrated further associations with self-reported IPV exposure and reports of physical health outcomes. These were less consistent across measures than comparable links with mental health outcomes, which may be expected given that the most common forms of violence reported by participants were emotional, rather than physical. However, the analyses of data from transitioned personnel indicated that reports of IPV exposure were still associated with substantial increases in the likelihood of reporting poor self-rated health, and multiple health-related conditions, while there were significant (although relatively modest) associations with reports of head and musculoskeletal injuries. Notwithstanding few health-related measures that were administered to partners, the corresponding analyses suggested additional links with reports of IPV exposure and poor self-rated health. Such findings support the view of IPV exposure as a health-related concern among transitioned personnel and partners, which may provide further grounds for these issues to be considered routinely in health care contexts. Similar assertions have been increasingly promoted in non-military health care contexts, where IPV-related conditions are expected to increase levels of usage and contact with health services. These have thus been identified as important contexts for engaging patients who have experienced IPV [37].

**5. What are the help-seeking behaviours and patterns of transitioned veterans and partners who report exposure to IPV?**

In the context of associations with self-reported IPV exposure and increased levels of mental and physical health problems, the analyses in Part 5 involved direct examination of implications for help-seeking. These included analyses of data from transitioned personnel which demonstrated that reports of IPV exposure were linked with an increased likelihood of recognising concerns about mental health, greater frequencies of having sought mental health assistance and making recent visits to any health professional. Comparable findings of over-representation of patients who report IPV in health services have been reported in international studies of veterans [91], and provide direct evidence of service-level consequences of violence exposure in Australian contexts.

These results suggested major points of contact with mental health care providers for transitioned personnel who report exposure to IPV, with more than 40% of veterans who reported IPV having sought mental health support in the last year. This was provided mainly by GPs/Medical Officers, psychologists, and psychiatrists, and for primary presenting problems that included depression, anxiety and relationship problems. Such findings suggest that services providing mental health support to veterans may comprise important settings for identifying and addressing IPV exposure, while also highlighting the need for vigilance for IPV among clients who present with common mental health problems, in addition to relationship difficulties. That is, while there are some transitioned veterans who are exposed to IPV and present to services for relationship problems (which presumably often includes IPV), there are many others who report other presenting problems (particularly depression and anxiety), and there is a need for initiatives to improve identification of IPV in these instances.

More than 90% of transitioned veterans who reported IPV exposure described recent visits to health professionals, suggesting additional points of contact with the health system. Most notably, more than 85% of veterans who reported IPV exposure described having visited a GP in the last year, while more than half reported visits to specialist doctors and dental professionals. In comparison, around 30% of these veterans described having visited a psychologist. Such findings suggest that while mental health services provide important opportunities to identify and engage many veterans who have been exposed to IPV, there is additional value in programs that are situated in general practice or dental clinics that may ultimately have contact with larger numbers of patients. General practice is commonly recognised as an important setting for initiatives that aim to improve identification and responses to IPV in non-military settings [94, 95]. Similarly, dental clinics are increasingly recognised as important settings for identifying and responding to IPV [96, 97], and there is also precedent for IPV training programs targeting dental practitioners in military-specific services in the U.S. [80].

There was comparably limited data collected about the help-seeking behaviours of partners of transitioned members, and there is less that can be said with certainty about implications of self-reported IPV exposure. However, the corresponding analyses indicated a significant association with reports of partner concerns about mental health, although not with having sought mental health assistance —further data on any health care visitations were not collected. However, the absolute levels of mental health help-seeking among partners who reported exposure to IPV were above 40%, which was comparable to rates reported by veterans. Accordingly, these findings suggest that mental health services, in particular, also encounter substantial numbers (almost half) of partners who report experiencing IPV, and may thus be considered suitable contexts for identifying and addressing violence exposure in this population.

**6. What are the factors that relate to the presumed use of IPV among transitioned veterans?**

The final analyses considered data from a subset of couples in which survey information from veterans could be linked with reports of IPV exposure from partners. The relevant findings should be viewed in terms of unique limitations associated with considering information from a subset of veterans (and partners) who provided consent for data linkage, who may not be representative of all couples. Furthermore, the smaller sample size provided lower levels of statistical power when compared to analyses in previous sections. Several variables could not be considered because of limited variability, and some sub-groups were too small for analyses. For instance, the couples' data comprised veterans who were mostly (>90%) men, and partners who were women, and there was little information on couples in which veterans were women. Notwithstanding these caveats, the couples' data provided unique information about veteran-related factors that were associated with partner reports of IPV exposure, which were thus considered as indicators of presumed IPV use by transitioned personnel.

Descriptive analyses of this data identified around 46% of couples in which there were reports of IPV use by veterans, and in around half of these cases there was also evidence of IPV use by the partner. Accordingly, they indicate that while many instances of IPV may be 'uni-directional' (and reflect the use of violence by the veteran against their partner), there are also likely instances of 'bi-directional' IPV used by both partners. Such bi-directional violence has been previously documented in international studies of veterans and current personnel [98], and may reflect a range of underlying dynamics. These include instances of (a) 'violent resistance', in which one partner is coercive and controlling and the other uses violence in self-defense, as well as (b) 'situational couple violence' in which behaviours are not motivated by power and control, as opposed to alternative factors (e.g. emotional dysregulation and poor conflict resolution skills) that may involve escalating behaviours by both partners [99]. The relative extent of these different dynamics cannot be inferred from the current data, and this reaffirms the need for further research to improve understanding of the nature and context for IPV use in the intimate relationships of transitioned veterans.

Subsequent analyses considered veteran-related risk and protective factors for presumed IPV use, which identified that reports of these behaviours were more common in the context of discernible clusters of factors including (a) socio-economic characteristics reflecting lower education, unemployment and income (particularly receiving an invalidity pension and/or compensation), as well as financial stress, and (b) social factors that include lower levels of social support. Such findings are consistent with broader non-military research which indicates that community-level measures of socioeconomic disadvantage (e.g. unemployment levels, low average income) are regularly associated with occurrences of IPV [87]. As noted previously, such findings have been attributed to factors such as the increased density of alcohol outlets and associated rates of alcohol abuse in disadvantaged areas, which may also be characterised by greater housing instability and weaker levels of social or community connection. The latter may influence the use of IPV through reduced levels of 'social control'—for example, as reflected in perceptions of few social sanctions on violent behaviour [87]—that may also help account for findings of associations with IPV use and lower social support in this study. Such findings strongly indicate that future endeavors to understand the drivers of IPV among veterans should include consideration of the economic and social circumstances commonly faced by veterans during the transition out of military service.

Descriptive evidence of the health and wellbeing profiles of veterans who were identified as using IPV indicated that these presumed behaviours were also elevated in the context harmful drinking, PTSD,

depression and problem anger. Such findings should be considered initially in relation to limitations of the cross-sectional data, which do not provide evidence of causal processes that underlie associations. That is, the findings do not necessarily suggest that harmful drinking, for example, causes violent behaviour, although complex relationships in which alcohol problems exacerbate violence are plausible [100]. However, the findings clearly demonstrate that veterans who may be identified as using IPV are likely to experience many co-occurring mental health problems. These include addictive behaviours and posttraumatic mental health issues, and it seems reasonable to suggest that these issues must be managed in initiatives that target the use of IPV among transitioned veterans.

The analyses also identified another strong association with suicidality, whereby transitioned veterans who were identified as using IPV were found to report a 2.8-fold increase in rates of past year suicidal ideation. In part, these findings may reflect influences of posttraumatic mental health problems, including depression and PTSD, and do not necessarily imply a causal pathway that extends from IPV use towards suicidality directly. However, there is a growing body of broader evidence that has identified similar links with IPV use and suicide risk, and has proposed plausible mechanisms connecting these issues [101]. In conjunction with the current findings, this literature suggests that IPV use should also feature in efforts to understand and reduce the risk of suicide, including among veterans, and might also provide grounds for consideration of IPV-specific suicide screening and intervention programs [101].

The final analyses identified links with presumed IPV use and physical health-related outcomes (e.g. poor self-rated health, unfit medical status), along with frequent reports of engagement with health-related services. While there were no significant associations with reports of IPV use and recent help-seeking, these likely reflect lower levels of statistical power, as well as generally high rates of help-seeking for these veterans as a whole. For example, nearly 40% of transitioned personnel who were identified as having used IPV reported having recently sought assistance for mental health (mainly from psychologists, GPs/Medical Officers and psychiatrists), while around 95% reported visitations to any health professional in the past year. Specifically, more than 90% of these veterans reported recent visitations to a GP, while more than half reported visits to specialist doctors or dental professionals. These patterns of visitation were similar to the help-seeking profiles of veterans who reported exposure to IPV, which is important given that men, in particular, often report lower rates of health care usage, relative to women [102]. While this has been identified as a feasibility issue for programs that aim to engage men who experience IPV in other health service settings [103], the current findings suggest that many veterans who may use IPV are highly engaged with mental health and generalist healthcare services. These could provide uniquely appropriate settings for programs that aim to improve the identification and response to violent behaviours among veterans.

## Limitations

The findings from the current project should be considered in relation to major limitations of the available data and associated analyses. Many of these were associated with the specific measure of IPV exposure that was available for analyses, that comprised five items derived from the Woman Abuse Screening Tool (WAST). By way of examples:

- The items chosen for use in this project provided the most direct indicators of IPV exposure (e.g. 'Has your partner ever abused you physically?') and excluded questions addressing more ambiguous forms of relationship tension or difficulties (e.g. 'Do arguments ever result in your feeling down or bad about yourself?'). Although this approach provided advantages in relation to supporting content-valid interpretations of survey responses, the approach differs from how the WAST has been used in prior published research, and this means that the current results are not directly comparable with prior literature using this scale.
- There is limited psychometric evidence available regarding the WAST, although the one available study of an English-language version that reported properties for the entire scale suggested high sensitivity (see Box 3 in Part 1 – Methodology).
- The WAST measure of IPV exposure was associated with strengths including multiple items which asked separately about physical, emotional and sexual IPV. Notwithstanding this, the items provide coarse and often subjective measure of exposure – these were not anchored to clear examples of behaviour and do not yield nuanced information about the impacts of IPV or coercive and controlling behaviours and contexts for violence. Furthermore, the WAST items have not been used extensively in samples of men, and it remains unclear whether men and women understand and answer items from this scale in the same way.
- Like all measures of IPV based on self-report, it is possible there may be reporting biases and tendencies to under-report levels of IPV exposure. Although the magnitude of such biases remains unclear, they are supported by studies of U.S. couples (57) which suggest that men in particular may tend to under-report their own exposures to IPV (when compared to their partners who report using IPV). Importantly, such possibilities would suggest that the true rates of IPV exposure are even higher than those observed in the current study, which accordingly may be viewed as providing lower-bound estimates of IPV levels among current and former military personnel.
- The WAST items were embedded in a preamble which asked about experiences in the current relationship, whereby the recency of relevant exposures (e.g. in the past year or month) remains unclear. However, it is also important to acknowledge that IPV that occurs in the context of coercive and controlling behaviours is typically viewed as a pervasive and enduring pattern of behaviour, which means that exposures in the current relationship can be defensibly viewed as reflecting recent or ongoing IPV.
- The IPV measure in the MHWTS was only administered to participants who reported being in current relationships, and accordingly would not capture IPV exposures perpetrated by former partners.

In addition, there were also previously mentioned limitations associated with reliance on cross-sectional data, which means that the direction of effects underlying associations remains unclear, while the FWS data was not fully representative of the total population of all partners and family members. Furthermore, the sample size available for analyses of the MHWTS and FWS data varied widely, which means that statistical power also differed across analyses (and was lowest for analyses of the couples' dataset), while some sub-groups (such as men who are partners of transitioned

personnel) were not well represented in the available data. The analytic samples were comprised of the sub-set of participants who were in current relationships, which tended to over-represent participants who were older and reported greater numbers of years in service (when compared to the original samples). Presumably, this also excludes consideration of most instances of IPV used by former partners. Finally, the data were collected in 2015 and do not provide insights into more recent experiences of violence; for example, subsequent to the COVID-19 pandemic.

## Policy Implications

**KEY IMPLICATIONS**

- Exposures to IPV, including emotional and physical forms of IPV, should be recognised as important issues that can influence the mental health of ex-service personnel and partners across the transition period.
- There is a need for an overarching policy framework that can guide planning and investments in IPV initiatives across military and veteran-specific settings, and Australian contexts.
- This policy framework may comprise a specific action plan for military and veteran families, which aligns with *The National Plan to End Violence against Women and Children 2022-2032*.

The project indicates that presumed IPV exposures, including emotional and physical forms of IPV, are common concerns among current military personnel and transitioned veterans in Australia, as well as their partners. Accordingly, it signals the need for increased recognition and responses across military and ex-service settings. It also indicates that IPV exposures were commonly reported by transitioned personnel and partners with children, which highlights likely impacts on children, and thus the importance of child-focussed interventions and safeguarding. While the implications of witnessing IPV for children's mental health and wellbeing could not be considered directly in this report, intergenerational impacts of parental IPV exposure on psychosocial, physical and emotional health outcomes of children should be expected [104].

The highest levels of IPV exposure were reported by the partners of transitioned personnel, along with veterans themselves, with analyses of relevant data also indicating that such reports were associated with posttraumatic mental health conditions and other serious difficulties, including suicidality. Among transitioned personnel, for example, self-reporting IPV exposure was one of the strongest single factors associated with probable PTSD and suicidality, when benchmarked relative to other forms of trauma. Accordingly, the findings suggest that these exposures should be recognised as important factors that can influence the mental health of ex-service personnel and partners across the transition period. However, they also indicated that levels of reported IPV exposure were high in absolute terms among partners of current serving personnel, and ADF members themselves. As such they signal the further need for strategies across agencies that support current military personnel and families.

Cowlishaw et al. [80] have outlined a framework for IPV interventions that can guide the planning of initiatives in military and veteran-specific settings, and Australian contexts. This distinguished across interventions that target IPV exposure and use, respectively, as well as major intervention categories including:

(1) Prevention strategies, comprising *universal strategies* which target entire populations, *selective prevention strategies* which target sub-populations that demonstrate increased risk, and *indicated prevention strategies* which target individuals who report early signs of IPV, but before they progress to severe levels of threat or impact
(2) Responses to IPV that focus on individuals who are currently experiencing or using violence, and
(3) Recovery-oriented interventions that focus on supporting individuals in the longer-term aftermath of exposure (for example, when individuals are no longer in unsafe situations).

These categories align with the four 'Pillars' that have been outlined in *The National Plan to End Violence against Women and Children 2022-2032*[7], which also describes strategies in terms of prevention, early intervention (comparable to indicated prevention), response and recovery.

IPV is a complex psychosocial issue and it should be expected that achieving meaningful and sustained reductions will require comprehensive and coordinated strategies that include prevention, response and recovery-oriented interventions. Furthermore, there are military occupational health models [105] which suggest that strategies should be adapted to fit the unique characteristics of the military and ex-service environment. For current serving personnel, this includes a unique organisational culture and specific system of services, including a separate health system that provides services on and off-base, and a military justice system that incorporates separate police services which enforce civilian and military law. As relates to IPV, the application of military and civilian law may create a complicated system of legal obligations which could impact on IPV disclosures and safety. For example, in extreme instances there may be requirements under military law to provide 'notice to show cause' to personnel who are accused of violence, which could be a barrier to disclosure by partners and impact on safety. For military families, there may be unique experiences associated with regular relocations for military postings, which can lead to disruptions to careers and support networks, as well as reliance on the ADF member for access to housing and services. Transitioned personnel also encounter unique challenges associated with establishing careers and identities outside the military, while often managing mental health and psychosocial difficulties. Amidst a range of transition-related stressors, these difficulties signal expectations of high need for services, and thus engagement with a network of providers that may include publicly funded veteran-specific services, ex-service organisations, and mainstream services that can have limited levels of military cultural competence.

Given findings which indicate the likely extent of the problem, as well as unique features of the military and ex-service environment, there would seem to be a particular need for an overarching strategy to guide the design and coordination of IPV interventions across contexts. This could be positioned as a **specific action plan for military and veteran families**, which aligns with the recent *National Plan to End Violence against Women and Children 2022-2032.* There is already an example of a dedicated plan for Aboriginal and Torres Strait Islander communities, which is referenced in the National Plan and provides precedent for specific strategies for other groups. These include priority populations that were identified in the consultation report for the draft National Plan [106], which included Aboriginal and Torres Strait Islander communities, as well as children and young people, LGBTQIA+ communities, people with disabilities, migrant women, rural or regional and remote communities, older people, and finally also military and veteran families.

[7] https://www.dss.gov.au/ending-violence

A specific action plan would provide a means for developing cross-agency strategies involving DVA and Defence, and would align with recommendations of the Productivity Commission report on the compensation and rehabilitation system for veterans that acknowledged the importance of a whole-of-life strategy for veterans[8]. In addition, a specific action plan would provide guidance to ex-service organisations and mainstream services that have roles in supporting veterans. Assuming that some factors which increase IPV risk among transitioned personnel have bases in military experiences, such coordinated activity would provide scope for strategies that are focussed on prevention of IPV, as well as the management of risk during the transition period (for example, when responsibilities for care shift from military to ex-service agencies, as well as mainstream services). It would also provide a means for considering the joint requirements of different strategies, such as initiatives that focus on improving recognition of IPV in veteran-specific settings, which will likely increase demand for specialist services and should be implemented in parallel with increased resourcing of such services. Finally, the process of developing a specific plan would also provide the opportunity to embed key features from the National Plan in strategies for military personnel and veterans. These include expectations of a long-term approach to change and a consultative process that prioritises the lived experiences of veterans and family members, and particularly those with histories of IPV.

In the context of an overarching plan for addressing IPV within military and veteran families, the findings from this project suggest priority areas that could inform relevant programs. At the broadest level, these have been organised in terms of strategies for addressing IPV exposure and use, respectively, as described below.

[8] https://www.pc.gov.au/inquiries/completed/veterans/report

## Strategies for Addressing IPV Exposure

**KEY IMPLICATIONS**

- There is a need for enhanced strategies and programs to address IPV exposure among current and former military personnel, and their partners.
- This includes strategies for improving recognition and responses to emotional IPV, which is the most common form of exposure and is associated with poor mental health and psychosocial outcomes.
- Strategies are needed to target IPV exposures across multiple groups, including partners of current members and transitioned personnel, as well as current and former ADF members themselves. This also includes personnel who are men and those who are women.
- Transitioned personnel who reported IPV exposure were regularly encountered in mainstream health settings, and there is a need for strategies to improve recognition and responses to IPV among veterans and families in these settings.
- Transitioned personnel who reported IPV exposure were regularly encountered in veteran-specific service settings, and there is also a need to improve recognition and responses to IPV in these veteran-specific settings.
- IPV exposure was common in the context of high socioeconomic and financial hardship, and services providing financial or social assistance to veterans or partners, including ex-service organisations, may provide other important contexts for identifying and responding to IPV.
- IPV exposure is associated with high levels of mental health burden among transitioned personnel and partners, and this indicates the need for targeted mental health support when considering IPV as an index trauma.

The findings signal need for enhanced strategies and programs to address issues of IPV exposure among current and former military personnel, as well as their partners. In addition to physical violence, the results indicate that programs should focus on psychological or emotional forms of IPV, which were the most common forms of exposure and were strongly associated with posttraumatic mental health problems and suicidality. They also indicate that strategies are needed to target exposures across multiple groups including partners of current members, partners of transitioned personnel, as well as current and former ADF members themselves. This includes personnel who are men and those who are women (additional gender identities were not represented in the available data). Such findings signal the importance of universal prevention programs, which may involve health promotion and social marketing campaigns focussed on healthy relationship behaviours, and improving awareness of non-physical forms of IPV including coercive and controlling behaviours. They also highlight the need for selective strategies or responses to IPV that can target the aforementioned groups in different ways. That is, there may be unique opportunities for addressing IPV among current versus former military personnel, and their partners, while different guidance may be available for men and women. The latter reflects greater evidence suggesting ways of addressing IPV among women, with less known generally about IPV exposure among men [107], while early studies also indicate that interventions that are helpful for women do not necessarily produce the same benefits for men [103]. Accordingly, this literature may identify interventions that can be readily

translated to address IPV exposure among women personnel, while equivalent programs for men follow different timelines and require foundational research.

Workplaces represent potentially important contexts where safety issues and awareness around IPV can be addressed [108]. There is increasing public discussion about the role of workplaces in addressing IPV, with primary prevention organisations such as Our Watch promoting violence prevention resources specifically for workplace settings[9]. There is also emerging evidence for targeted workplace interventions for addressing IPV [109], although we are not aware of any research in military organisational settings. Studies have examined programs that focus on recognising signs of IPV exposures, responding to victim-survivors and providing referrals to community-based resources; they do not yet address perpetrators of IPV [109]. Although limited and based in diverse organisational contexts, evidence suggests possible benefits to some IPV-specific workplace interventions. This includes outcomes such as increased knowledge of IPV and related policies, willingness to intervene, and provision of information and resources to IPV victims (there is currently scant research evaluating impacts on outcomes such as the incidence or frequency of IPV experiences) [109]. Interestingly, there are examples of interventions that impact IPV but are not specifically focused on violence, which may play a role in creating supportive workplaces and organisational cultures that encourage help-seeking [108]. Worth noting is the United States Air Force Suicide Prevention Program—a multi-faceted prevention initiative (combining policy, education and training elements) developed to improve help-seeking among Air Force personnel—which was associated with reductions in moderate family violence by 30% and severe family violence by 54% across years after the program launched (in addition to lower rates of suicide) [110]. This suggests that IPV interventions could be considered in relation to other workplace programs and policies, and also highlights broader dimensions of workplace culture that may be targets for intervention [109, 110].

Findings from the project also suggested settings where transitioned personnel who reported IPV were regularly encountered, and this included mainstream health services such as general practice. With regards to such services, there is a growing focus internationally on health sector initiatives which aim to improve recognition and responses to patients who experience IPV [37]. This includes in Australia, where guidelines for working with patients who report violence have been produced by the Royal Australian College of General Practitioners (RACGP)[10]. These include recommendations relating to case identification, for instance, which includes advice *against* routine screening for IPV among all patients, with recommendations instead for asking about exposure when patients present with clinical indicators (such as depression or anxiety). These guidelines also acknowledge important sub-populations, including Aboriginal and Torres Strait Islander communities, as well as people with disabilities and LGBTIQA+ Australians. However, there is no reference to military or veteran families, which are also excluded from guidelines for public mental health services[11]. The current findings suggest that this may be an important omission which should be addressed as part of broader endeavours to increase recognition of IPV exposure among veterans and families within mainstream services. These may also involve including content addressing IPV in military and veteran focussed modules of foundational training programs (such as the Military and veteran health module of the

[9] https://workplace.ourwatch.org.au/
[10] https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/abuse-and-violence/preamble
[11] https://www.health.vic.gov.au/key-staff/chief-psychiatrists-guideline-and-practice-resource-family-violence

RACGP curriculum[12]), ensuring data on veteran status is collected and visible in electronic client records, and also in systems for improving responses to the health needs of veterans. The latter include Veteran Health Checks[13], for example, which are funded by DVA to enable GPs to conduct one-off assessments of the health needs of transitioned personnel. These currently include consideration of alcohol use and distress, for instance, and provide another potential context for also addressing IPV risk and safety issues.

The results indicated that transitioned personnel who reported IPV exposure were also encountered regularly in veteran-specific service settings, including DVA treatment support services. As far as we know, there have been no programs that have been developed and piloted with the goal of improving recognition and responses to IPV exposure in veteran-specific services in Australia. However, recent research funded by DVA has supported the view of Open Arms services, in particular, as receptive settings for initiatives aiming to enhance identification and responses to IPV [111]. Furthermore, a recent review of IPV interventions in health services for military personnel and veterans in other jurisdictions has identified key examples of programs that have shown feasibility in international contexts [80]. These include IPV training programs for service providers, case identification and risk assessment strategies, as well as psychosocial programs which support clients who disclose IPV exposure. Research conducted in non-military health services identifies other features that could be considered in interventions for veteran-specific settings, including prompts and recording templates in electronic client records, as well as enhanced referral pathways to specialist violence services [112].

The finding that transitioned personnel and their partners who experience socioeconomic disadvantage and financial hardship were at greater risk of reporting IPV exposure also suggests roles in addressing IPV for services that provide financial and social support to veterans and their families. This includes organisations that provide housing, employment, and other material (e.g. financial) support, as well as DVA sections that engage with veterans through compensation and claims processes. Programs that increase the capacity of these welfare-related services to address IPV should be considered as part of comprehensive strategies to improve whole of system responses to exposure. Effective programs are likely to be multi-component and involve the development of leadership support for addressing IPV, training staff in first-line responses to disclosure, and potentially embedding violence specialists in claims teams to support the management of risk and safety issues.

In the absence of greater evidence from DVA support services in Australia, there will be uncertainty about IPV interventions that are acceptable and beneficial in these settings, and accordingly, there may be a need to generalise from practices recommended in other settings. For example, while there are different recommendations regarding the suitability of specific identification strategies across contexts, such as routine screening, there may be greater consistency regarding other practices that can be recommended. These include training for service providers on how to recognise the signs of IPV exposure and respond appropriately, as well as structured systems for documenting IPV in client records. These could be identified as part of a formalised guideline development process, which involves bringing together specialists in both IPV and veteran's mental health care, as well as individuals with lived experience of violence. The view of this would be towards producing practice points for veteran-specific services that can be recommended based on expert consensus.

[12] https://www.racgp.org.au/education/education-providers/curriculum/curriculum-and-syllabus/units/military-and-veteran-health
[13] https://www.dva.gov.au/providers/health-programs-and-services-our-clients/veterans-health-check-providers

The findings provided further indications of mental health burdens from IPV exposure among transitioned personnel and partners, which accordingly suggest the need for the targeting of mental health support that considers IPV as an index trauma. There are different types of program that may be relevant and range from short-term interventions addressing immediate emotional needs in crisis-response settings [113], to intensive psychological therapies for posttraumatic mental health problems [114], and these could be delivered in veteran-specific services. In between may be opportunities for moderate intensity programs that address the unique needs of veterans and partners who report IPV exposure. By way of example, the 'Recovering from IPV through Strength and Empowerment' (RISE) program has been developed in VHA services in the U.S. and comprises a transdiagnostic counselling intervention which is grounded in principles of empowerment and trauma informed care, and includes modules targeting issues for women who experience IPV (e.g. safety planning). RISE has shown large benefits to patients in pilot studies [115] and randomised trials [116] with women veterans, and has produced positive outcomes when administered in routine care in VHA services [117]. Such evidence-based mental health interventions can also be adapted to focus on reducing the risk of future IPV (including intergenerational risk), and seem particularly urgent in Australian contexts given findings which indicate that exposures are linked with large increases in the risk of suicidality.

## Strategies for Addressing IPV use

**KEY IMPLICATIONS**

- There is a strong need for initiatives to address the use of IPV by current and former military personnel in Australia, and particularly the use of emotional and physical violence by male veterans against their partners.
- Initiatives that target IPV use should include a focus on prevention, and thus programs considering the military environment as a workplace setting, where some drivers and cultural factors that reinforce the use of IPV are presumably established.
- Generalist healthcare services and welfare service settings may provide important contexts for identifying and engaging veterans that use IPV, and transitioned veteran status may be an index for vigilance for IPV use that can be integrated with existing guidelines.
- Veteran-specific mental health services also provide promising contexts for identifying and engaging veterans who use IPV, and opportunities for trialing novel intervention approaches and programs for responding to IPV use among current and ex-service personnel.

Findings from the current project signal an additional need for initiatives that address the use of IPV by current and former military personnel in Australia, and particularly the use of violence by male veterans against their partners. These were mostly women in this project, given that male partners and women veterans were not greatly represented in the couples' data, which were the only information available on IPV use by transitioned personnel (accordingly, the current project does not speak to the use of IPV by women veterans). This general focus is critical given that strategies which address the use of violence also provide the most direct ways of reducing IPV exposure, and associated mental health and psychosocial impacts.

Initiatives that target IPV use should include a focus on prevention, and thus programs considering the military environment as a workplace setting where some drivers and factors that reinforce the use

of IPV could be established. These may include attitudes which condone violence, rigid gender stereotypes, and cultures of masculinity that emphasise aggression, dominance and control, which are all linked with violence against women generally [118]. Relevant workplace strategies may be positioned as contributing to the national strategy for prevention of violence against women [118], which targets the policies, systems, and structural factors that promote drivers and reinforcers of IPV use. However, given gaps in understanding of these factors among current and former military personnel, and dynamics that could lead to resistance to prevention efforts within military environments (which could include a view of masculine culture as being critical to operational effectiveness), it seems likely that the development of prevention programming that reflects a detailed understanding of the cultural context will be a long-term undertaking that first requires foundational research. In the short-term, relevant initiatives may focus on establishing 'prevention infrastructure' [118], including organisational bodies with responsibilities and resources to lead prevention activities in military settings, and mechanisms for gathering data and monitoring changes over time. Initiatives which may be feasible in the short-term also include indicated prevention programs involving home visitation services [119] or interventions for couples [120] that have demonstrated feasibility in international jurisdictions. These may target veterans who are identified as being at high risk for IPV, such as those receiving compensation, reporting difficult financial or economic circumstances, as well as those reporting social isolation and relationship dissatisfaction. There may also be a role for targeted education programs (for example, which focus on healthy relationships and bystander intervention), which have been developed for youth or young adult populations [121], and could be adapted and considered for effectiveness in military and veteran-specific contexts.

The current findings also identified settings where transitioned personnel who used IPV were regularly encountered, and these suggest contexts for response-oriented strategies for violent behaviours. They included generalist healthcare services, such as general practice, along with mental health services received from various providers, and for presenting problems that included depression, anxiety and relationship problems. Socioeconomic disadvantage and financial hardship were also shown to be risk factors for presumed IPV use, and again these findings highlight potential roles for services that provide economic and social support to veterans in identifying and responding to IPV use.

In general, there is less advice available regarding ways of identifying and responding to clients who use IPV, relative to those exposed to violence, and this parallels the focus on IPV exposure in health services generally. By way of illustration, the RACGP guidelines on addressing IPV in general practice contain relatively modest guidance on working with patients who use IPV, which includes the following key principles:

- Generalist providers should <u>not</u> provide counselling support to both partners that use and are exposed to IPV, given concerns about increasing safety risks.
- The safety of partners and children who are exposed to IPV should be predominant concerns when working with patients that use violence.
- Mental health issues and substance use problems may provide 'an index of suspicion' for the use of IPV and prompt questioning.
- Questioning about use of violence can be difficult and may benefit from 'funneling questions' (which start broad and then become more specific).
- Men's behaviour change programs are the referral options of choice.

In the context of generalist healthcare, the current findings suggest that identifying as a recently transitioned veteran could be considered as an index of concern (or vigilance) for IPV use, although there should be sensitivity to the risk of contributing to unhelpful stereotypes about veterans (e.g. which over-emphasise propensities towards anger and violence in the context of trauma exposure) that may introduce additional barriers to help-seeking. Otherwise, the aforementioned principles outlined by the RACGP could provide a preliminary bases for guiding practice with transitioned veterans who use IPV.

There may be different recommendations provided in mental health services, and particularly in veteran-specific settings which could provide opportunities to consider novel ways of responding to the needs and experiences of transitioned personnel who use IPV. By way of example, there may be opportunities in veteran-specific services for enhanced approaches to identifying IPV use, which align with U.S. studies that have developed tools to support routine questioning about IPV among veterans [122], and have identified factors that are necessary to support screening for IPV use in VHA services [123]. There may also be opportunities to consider developing specific intervention approaches and programs for responding to IPV use among current and ex-service personnel. These should be considered in relation to broader concerns about existing 'perpetrator programs', which partly reflect evidence of low engagement and high drop-out among participants [124], little research demonstrating effects on violence (particularly in Australia) [124], as well as preliminary studies indicating that impacts of these programs on behaviour may be modest [125]. There is also uncertainty about whether existing approaches to behaviour change in Australia are suited to address all forms of violence used by current and ex-service members, which includes IPV that occurs in the context of PTSD, harmful drinking, problematic anger and suicidality. Accordingly, there may be a need for new military and veteran-specific programs for responding to IPV use, which could be based on trauma-informed programs that have demonstrated beneficial effects among U.S. veterans [126]. Alternatively, there may be specific approaches to behaviour change that could be embedded in veteran-specific mental health services. These provide unique contexts for interventions given that the service system is already configured to manage posttraumatic mental health problems that may complicate similar programs when delivered in other contexts.

Finally, it is critical that any individually focussed interventions targeting IPV use are developed in parallel with broader reforms that ensure the safety of victim-survivors, while holding individuals that use violence accountable for their behaviours. Such reforms may focus on providing guidance and frameworks for correctly identifying the person most in need of protection in family violence cases [127], as well as enhanced systems for enabling services to share information about IPV (for example, with police services). The latter may be critical to support ongoing management of safety risks for both partners and children, and could be based on successful systems and policy frameworks established in some jurisdictions, such as the Family Violence Multi-Agency Risk Assessment and Management (MARAM) Framework in Victoria[14].

[14] https://www.vic.gov.au/maram-practice-guides-and-resources

## Implications for Research and Evaluation

**KEY IMPLICATIONS**

- Foundational research is needed to improve understanding of the nature and context for violence experienced and used by current and former military members in Australia, which is critical to inform successful prevention programming.
- Relevant research should consider improved measures including direct questions about coercive and controlling behaviours.
- Qualitative and quantitative studies are needed to enhance and measure the impacts of programmatic responses to IPV across military and veteran-specific workplace and service settings.
- Research may also provide a context for developing and trialing new programs of support for veterans/partners who disclose IPV, including recovery-oriented interventions, as well as trauma-informed treatments or behaviour change programs for veterans who use violence.
- In addition to veteran-specific mental health services, there may be other contexts for IPV interventions which suggest the need for research to guide and improve potential programs.
- These may include pilot initiatives embedded in health services for current serving personnel, as well as alternative environments such as ex-service organisations that provide welfare assistance, and administrative sections of DVA that manage compensation claims and processes.

This project provides a preliminary examination of the frequency, risk factors and implications of self-reported IPV exposure among current and former military personnel in Australia, as well as their partners, and thus it highlights the need for further research on violence exposure and use in relevant settings. Although the lack of prior Australian studies suggests a general need for evidence across many areas, the preceding discussion identifies critical areas for research that is urgently required to advance strategies for addressing IPV in military and veteran families.

The development of strategies for preventing IPV initially requires foundational research to improve understanding of the nature and context for violence experienced and used by current and former military members. The current project was based on data obtained using a limited measure of IPV, which provided coarse information about emotional forms of violence and did not shed light on sub-types and contexts for IPV [128]. Accordingly, there remains uncertainty about the nature of exposures reported in this study, and particularly the extent to which IPV was experienced in the context of coercive and controlling behaviours. This initially highlights a need for cross-sectional survey data involving comprehensive and validated measures, ideally with an evidence-base for sensitivity and specificity in detecting multiple forms of IPV, and including direct questions about coercive and controlling behaviours [129]. Surveys should also include assessments of violence supportive attitudes across military and veteran communities, including among individuals who do not use IPV. There is a need for prospective studies including considerations of causal pathways that can suggest targets for prevention and intervention. Prospective studies would ideally sample participants while personnel are still serving in the ADF (for example, during initial phases of their military career), and track changes in risk and protective factors across the transition period. Furthermore, such cross-sectional and prospective data should be considered alongside information from other sources. These include administrative data on reports of IPV to support services or military police or leadership, which require studies to access, prepare and analyse the data, and indicate the extent of IPV-related

reporting and trends over time. They also include qualitative studies that can provide in-depth accounts of the lived experiences of key groups that are exposed to IPV, such as:

- Partners of current and ex-service personnel, who may report different experiences of violence, help-seeking, and factors that enhance or reduce safety.
- Children of current and former ADF members who are also exposed to parental IPV and should be recognised as victim-survivors in their own right.
- Current and ex-service personnel themselves, including women and men, who are also likely to have different experiences of violence, help seeking, as well as barriers to care.

Relevant studies should also integrate perspectives of other key stakeholders, including military leaders and personnel involved in enforcing military law, which can support broader understandings of factors that drive and reinforce the use of IPV, and could impact the feasibility of future policy settings.

There is a further need for qualitative and quantitative studies that evaluate the impacts of programmatic responses to IPV across military and veteran-specific service settings. Foremost among these are veteran-specific mental health and family support services, such as Open Arms, which have been identified as regularly encountering clients who report IPV use and exposure [111]. Key activities in this setting may involve developing protocols and templates in client records to standardise recording of encounters with clients who disclose IPV, with analyses of resulting data conducted to establish a baseline for measuring impacts of changed policy settings or pilot programs. The latter may include pilot identification strategies, such as routine screening and risk assessment, which may be planned jointly with qualitative studies to appraise the feasibility and acceptability of new practices. Critically, research studies may also provide a context for developing and trialling new programs of support for veterans/partners who disclose IPV, including recovery-oriented interventions, as well as trauma-informed treatments or behaviour change programs for veterans who use violence. Embedding evaluation in these initiatives can ensure programs are implemented in settings that routinely involve data collection, and can demonstrate that interventions produce tangible benefits, relative to costs, and are monitored for safety impacts for women and children.

In addition to veteran-specific mental health services, there may be other contexts for IPV interventions which suggest the need for research to guide and improve potential programs. These may include pilot initiatives embedded in health services for current serving personnel which may be informed initially by approaches used in mainstream health services. However, these will require research that can inform adaptations to suit military contexts, as well as ongoing evaluations of benefits, costs, and possible unintended consequences. There may also be initiatives that can be implemented outside of healthcare services, and in alternative environments such as administrative sections of DVA that manage compensation claims and processes, or ex-service and welfare organisations that provide financial and social support. There is less guidance available regarding the feasibility and scope of potential programs in public service settings, and research in this context may be required to address different questions about the capacities and attitudes of staff towards addressing IPV. Such foundational studies are likely to be essential to indicate receptivity and need for enhanced policies for responding to violence and provide an empirical basis to support the case for future investment and development in this area.

Finally, in the context of many knowledge gaps and associated needs for evidence regarding IPV exposure and use in military and veteran-specific environments, there should be consideration of the best ways of resourcing and commissioning future research in the long-term. Any large-scale program

of work will require both sustained and substantial investments of funding, which may benefit from joint contributions from multiple government departments, possibly including state government agencies. These could be governed by a range of possible mechanisms, which potentially include leadership bodies that are established under the proposed action plan for addressing IPV among military and veteran families.

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## Appendix 1 – Nomination and response rates in the MHWTS and FWS.

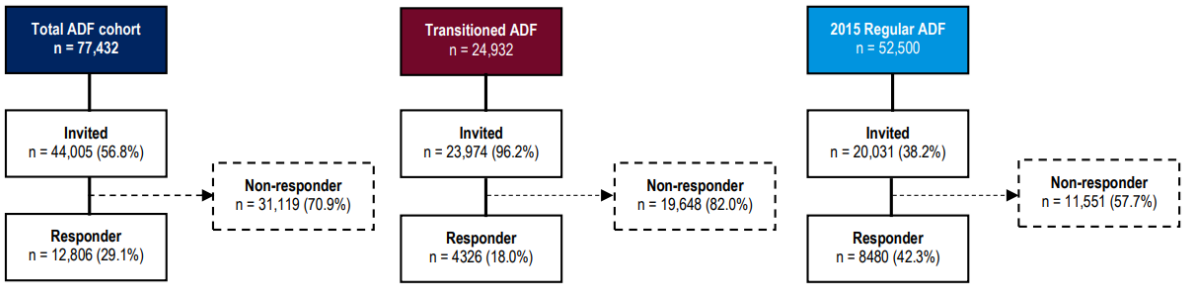


Figure A1.1. Survey response rates for the Transitioned ADF and the 2015 regular ADF; adapted from van Hooff et al [60] and reproduced with permission from the Department of Veterans' Affairs.

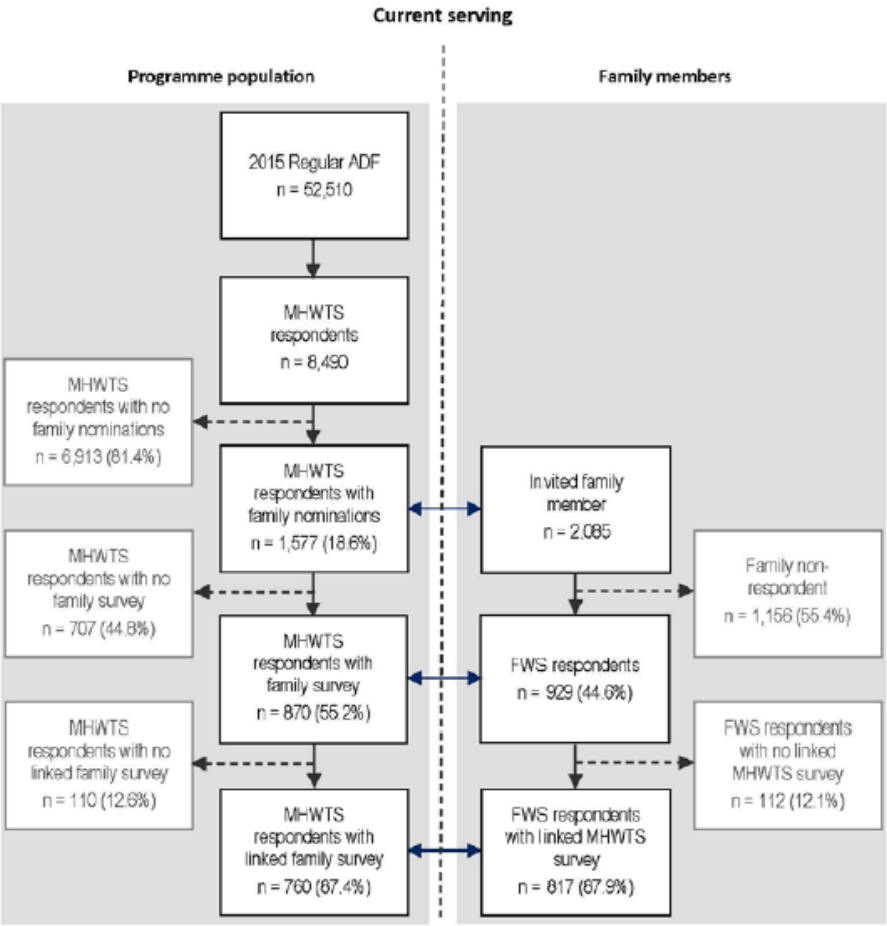


Figure A1.2. Nomination rate and FWS response rate for families of Current Serving MHWTS respondents; adapted from Daraganova et al. [61] and reproduced with permission from the Department of Veterans' Affairs. Note: These numbers differ from the MHWTS by n = 10 because some MHWTS respondents withdrew after participating in the MHWTS or had died. However, their family members had taken part in the FWS. A decision was taken to exclude these family members' data from the FWS dataset.

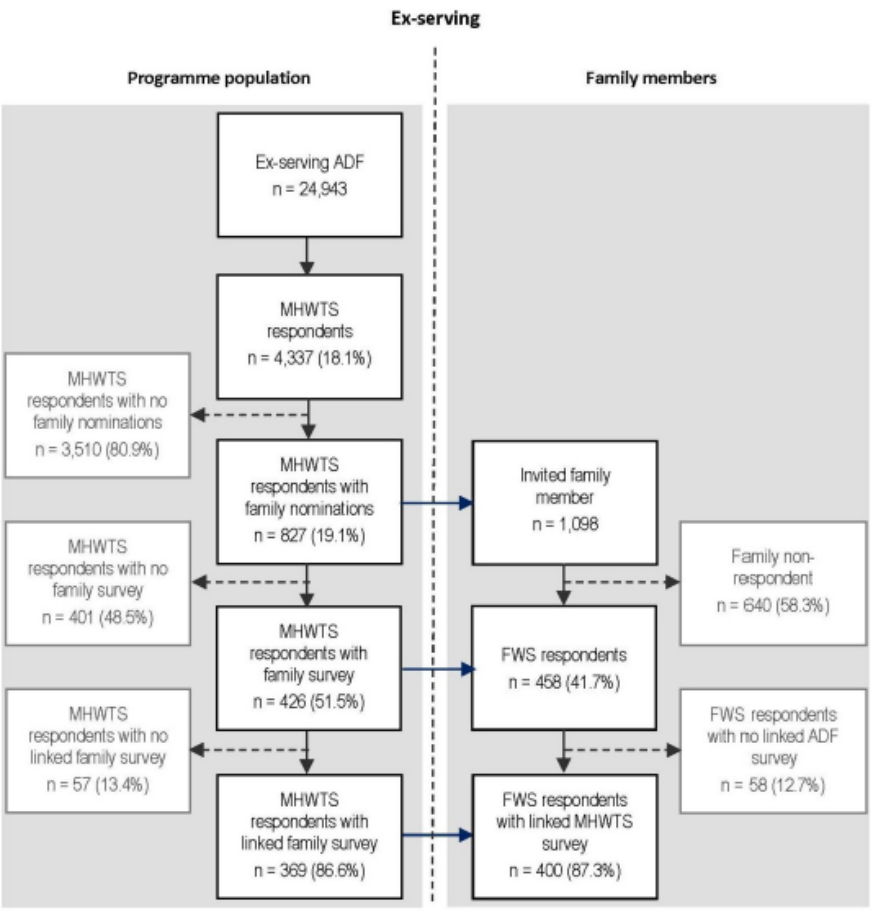


Figure A1.3. Nomination rate and FWS response for families of Ex-Serving MHWTS respondents; adapted from Daraganova et al. [61] and reproduced with permission from the Department of Veterans' Affairs. Note: These numbers differ from the MHWTS by n = 12 because some MHWTS respondents withdrew after participating in the MHWTS or had died. However, their family members had taken part in the FWS. A decision was taken to exclude these family members' data from the FWS dataset.

## Appendix 2 – Detailed explanation of measures

*Socio-demographic characteristics*

Socio-demographic characteristics included gender, age (18-27, 28-37, 38-47, 48-57, 58+ years), relationship status for The Programme (Not in a relationship; In a relationship not living together; In a relationship and living together) and relationship to nominator for the FWS (Spouse/ Partner, 'Ex-spouse/ Ex-partner, Parent (or Parent figure), Child (18+), Other), education (Primary or Secondary; Certificate or Diploma; University), employment status (Full/part time paid work; Unemployed; Retired; Other), main source of income (The Programme: Wage/salary/own business/partnership, Age pension or Superannuation, Invalidity service pension or VEA/SRCA/MRCA compensation, Other) (FWS: Paid employment, Spouse/partner income, Other).

*Service-related characteristics*

Service-related characteristics in The Programme included ADF service (Navy, Army, Air Force), Rank (Commissioned Officer; Non-Commissioned Officer/Other Ranks), length of service (0-4, 5-9, 10-19 and 20+ years), serving status (Ex-serving; Active/Inactive reservist), Ever deployed (Yes; No).

Service-related characteristics in the FWS included respondent ever part of ADF, nominator ever deployed/deployed while together, number of relocations due to nominator's service, parent ever served with ADF.

*Discharge characteristics*

Discharge characteristics in The Programme included years since transitioned (0, 1, 2, 3, 4, 5+), Medical discharge[15] (Yes; No), DVA client (Yes; No), DVA treatment support since transition (white or gold card).

*Medical Fitness*

Medical Employment Classification (MEC) status was collected as part of the Study Roll. MEC is an administrative system designed to monitor physical fitness and medical standards in the ADF and is divided into four levels (either current or on discharge from the Regular ADF). MEC status was collapsed to create a new dichotomous variable 'Medical Fitness', which included those that were 'Fit', meaning fully employable and deployable, or deployable with restrictions, and those that were 'Unfit', meaning not fit for deployment, original occupation and/or further service. 'Unfit' can include those who are undergoing rehabilitation, transitioning to alternative return-to-work arrangements or are in the process of being medically separated from the ADF. This variable is described in detail elsewhere [60].

*Traumatic deployment exposures*

Traumatic deployment exposures were assessed in The Programme using items taken from the Middle East Area of Operations Census Study [130]. Participants reported how many times they had experienced a list of 12 deployment exposures during their military career. Response categories ranged from 'Never' to '10+ times'. Examples of events included 'discharge of weapon in direct

[15] The preferred term 'medical separation' rather than 'medical discharge' is used in the report to represent this variable.

combat' and 'handled or saw dead bodies'. The number of events reported were summed to give an indication of career traumatic deployment exposure.

*Family characteristics*

Family characteristics in The Programme included household structure (person living alone, couple living alone, couple with child(ren), married with dependents unaccompanied, single parent with child(ren), other household type), whether the participant had children and having a spouse/partner affiliated with the ADF.

Family characteristics in the FWS included lives with nominator, children with nominator, length of relationship, number of people in household and whether their parent had mental health problems.

*Financial problems*

Financial problems were assessed using three measures: current financial status, current financial hardship and recent major financial crisis.

Current financial status was assessed by a single item taken from the HILDA Survey [131]. Participants were asked 'Given your current needs and financial responsibilities, would you say that you and your family are...' on a scale six-point scale: 'Prosperous', 'Very comfortable,' 'Reasonably comfortable,' 'Just getting along', 'Poor', 'Very poor'. Responses were combined to create a variable indicating 'Just getting along/ Poor/Very poor' versus 'Prosperous/Very comfortable/Reasonably comfortable'.

Current financial hardship was assessed by a single item taken from the Health and Wellbeing Survey of Serving and Ex-Serving Personnel of the UK Armed Forces: Phase 2 [132]. Participants were asked whether they were currently having any problems paying money they owe (e.g. loans from family/friends, credit cards, bank loans, utility bills, rent or mortgage repayments).

Recent major financial crisis was assessed in The Programme by a single item from a modified version of the 15-item version of the List of Threatening Experiences that measures recent stressful life events [133]. Participants were asked 'In the last 12 months, have you been personally affected by any of the following: You had a major financial crisis.'

*Housing stability*

Housing stability was assessed in The Programme using two measures: living in stable housing and concern about stable housing.

Living in stable housing in the last two months was assessed using a single item asking participants, 'In the past two months, have you been living in stable housing that you own, rent or stay in as part of a household?'.

Concern about stable housing in the next two months was assessed using a single item asking participants, 'Are you worried or concerned that in the next two months you may NOT have stable housing that you own, rent or stay in as part of a household?'. This item was taken from the Homelessness Screening Clinical Reminder (HSCR) [134, 135].

Homelessness was assessed in the FWS using eight items from the 2010 Australian Bureau of Statistics (ABS) General Social Survey [136] asking if the participants had ever been without a permanent place to live.

*Employment instability*

Employment instability was assessed in The Programme using two items from a modified version of the 15-item version of the List of Threatening Experiences that measures recent stressful life events [133]. Participants were asked 'In the last 12 months, have you been personally affected by any of the following: 'You were sacked from your job' or 'You became unemployed or you were seeking work unsuccessfully for more than one month.'

*Support*

Social support from friends and family was assessed in The Programme using an adapted version of the Schuster Social Support Scale [73]. Affective support was indicated by responses to questions about how often family/friends made them feel cared for and how often family/friends expressed interest in how they were doing. Negative interactions were indicated by responses to questions about how often family/friends made too many demands on them, how often they criticised them and how often they created tensions or arguments with them. All items were answered on four-point Likert-type scale ranging from 'Often' to 'Never'. Scores on the five items were summed separately for family and friends, creating two total scores.

Participants in the FWS were asked 'How many people would you count as close friends (i.e., people you feel at ease with, can discuss private matters with or call on for help)?'. Options ranged from 'None' to '16 or more'.

*ADF sense of identity*

Sense of identity in the ADF was assessed using four items adapted from Allen and Meyer's [137] Affective Commitment Scale. These items were positively worded, and asked about feeling like part of the family, sense of belonging, personal meaning associated with the ADF, and feeling emotionally attached to the ADF. Participants responded on a five-point scale from 1 = 'Strongly disagree' to 5 = 'Strongly agree'. Items were summed to create a total score.

*Member of any ex-service organisations*

Participants were asked how many ex-service organisations they were a member of. Responses to this question were dichotomised into yes vs. no.

*Lifetime trauma exposure*

Lifetime trauma exposure was assessed in The Programme using a list of 26 traumatic events taken from the Composite International Diagnostic Interview (CIDI 3.0) PTSD module [71]. Participants were asked if they had ever experienced any of the events in their lifetime. Examples included 'being in a life-threatening automobile accident' and 'having someone close to you die unexpectedly'. The number of events reported were summed to give an indication of total lifetime non-military trauma.

Participants in the FWS were also asked whether they had ever experienced a reduced list of 11 traumatic events (e.g. been sexually assaulted; been mugged, held up or threatened with a weapon). The total number of traumatic events experienced was summed.

*Posttraumatic Stress Disorder (PTSD) symptoms*

PTSD symptoms were assessed using the Posttraumatic Stress Disorder Checklist—Civilian Version [70]. The PCL-C comprises a 17-item self-administered questionnaire, which has been widely used for assessing PTSD symptoms in the past month. Participants were asked to rate how much they had been bothered by symptoms of PTSD in the past month (e.g. repeated, disturbing memories, thoughts or images of a stressful experience from the past) on a five-point scale from 1 = not at all to 5 = extremely. A total symptom severity score was obtained by summing scores across items to give a score between 17 and 85, whereby higher scores indicate greater severity of PTSD symptoms. A total score of ≥30 was used to identify probable PTSD. The PCL-C has excellent test-retest reliability and internal consistency and has been used extensively in the context of population-based research [70].

*Depressive symptoms*

Depressive symptoms were assessed using the nine-item Patient Health Questionnaire (PHQ-9). Each item comprising the PHQ-9 evaluates the frequency of one of the nine DSM-IV criteria for major depressive episode over the past two weeks. The PHQ-9 has been validated against clinical diagnoses from medical professionals and has superior operating characteristics to alternative scales [74]. A summed score of ≥10 on the PHQ-9 was used to identify probable major depressive episode in this study [74].

*Psychological distress*

Psychological distress was assessed using the 10-item Kessler distress scale (K10). The K10 is a widely used and validated measure of non-specific distress measured over the past four weeks [42]. Responses are scored on a five-point scale (where 5 = all of the time, and 1 = none of the time). Summed scores can be used to signal risk of mental health problems and high levels of psychological distress (K10 ≥20) [138].

*Alcohol use problems*

Alcohol use problems were measured using the 10-item Alcohol Use Disorders Identification Test (AUDIT). This scale examines quantity and frequency of alcohol consumption, potential alcohol dependence symptoms and problems related to alcohol, with a wide recall reference period varying for items across past week, month and year. The AUDIT is considered valid and reliable [139]. The first eight questions of the AUDIT are scored using a five-point Likert scale (scored 0-4), while the last two questions use a three-point scale (scored 0, 2 or 4). Given that the AUDIT does not comprise a unidimensional scale, the Cronbach's α internal consistency reliability was not informative and was not produced. A total score was derived by summing item responses, with summed scores ≥16 and ≥20 suggesting harmful drinking and probable alcohol dependence respectively [76].

*Anger*

Anger was assessed using the Dimensions of Anger Reactions 5-item scale (DAR-5) [77]. The DAR-5 examines anger frequency, intensity, duration, aggression, and interference with social functioning. Items are scored on a five-point Likert scale generating a severity score ranging from five to 25, with

higher scores indicative of worse symptomatology. Scores ≥12 indicated problem anger. This scale has been used previously to assess Australian Vietnam veterans, as well as US Afghanistan and Iraq veterans, and shows strong psychometric properties [140, 141].

*Problem gambling*

Gambling problems were measured using the Problem Gambling Severity Index (PGSI) [78]. The PGSI comprises nine items about gambling experiences and consequences which are scored on a four-point scale (0 = Never, 3 = Almost always), and has high internal consistency (Cronbach's α = 0.90) and strong associations with comparable measures [142]. Problem gambling was defined as scores ≥3.

*Suicidal ideation and behaviour*

Suicidal ideation and behaviour were assessed using four items that asked about suicidal thoughts, plans, and attempts in the last 12-months. Participants were asked to indicate whether they had experienced each of the following items in the last 12 months:

- 'felt that life was not worth living'
- 'felt so low that you thought about committing suicide'
- 'made a suicide plan'
- 'attempted suicide'.

Three of these items were adapted from the National Survey of Mental Health and Wellbeing [72], and the final item was devised by researchers for use in The Programme.

*Sleep*

Sleep was assessed using the Insomnia Severity Index (ISI) [143]. The ISI is a seven-item survey answered on five-point Likert scale (e.g. 0 = No problem; 4 = Very severe problem), yielding a total score ranging from zero to 28. Scores are summed and the total score is interpreted as follows: absence of insomnia (0–7); sub-threshold insomnia (8–14); moderate insomnia (15–21); and severe insomnia (22–28). A score of 15+ was interpreted as having a sleep disturbance.

*Aggression*

Aggression was assessed using two items taken from the 2010 Mental Health Prevalence Wellbeing Study [144]. Participants were asked how often they have been responsible for threatened or physical violence in the last month and responded on a five-point scale from 'Never' to '5 or more times'.

*Recent life events*

Recent life events were assessed using a 15-item modified version of the List of Threatening Experiences [133]. Participants were asked to indicate 'yes' if the event had occurred in the last 12 months. Examples of events included 'your parent, child or spouse died', 'you had a major financial crisis' and 'you broke off a steady relationship'. Items were summed to create a total score indicating the number of recent life events experienced.

*Contact with the law*

Contact with the law was assessed by a single item from a modified version of the 15-item version of the List of Threatening Experiences that measures recent stressful life events [133]. Participants were asked 'In the last 12 months, have you been personally affected by any of the following: You had problems with the police and a court appearance?'.

*Relationships*

Relationships were assessed in The Programme using measures of relationship breakdown, relationship problems and relationship satisfaction:

Relationship breakdown in last 12 months was assessed by two items from a modified version of the 15-item version of the List of Threatening Experiences [133]. Participants were asked 'In the last 12 months, have you been personally affected by any of the following?' – 'You had a separation due to marital/relationship difficulties?' and – 'You broke off a steady relationship?'.

Relationship problems in the last 12 months was also assessed using the List of Threatening Experiences [133]. Participants were asked 'In the last 12 months, have you been personally affected by any of the following?' – 'You had relationship problems with your spouse/partner?'.

Relationship satisfaction was assessed using a single item asking participants 'How satisfied or dissatisfied are you currently with your relationship with your partner?' on a zero to 10-point scale from 'completely dissatisfied' to 'completely satisfied'.

The FWS assessed relationship satisfaction using the Relationship Assessment Scale (RAS) [145]. The RAS is a seven-item measure with an overall, continuous mean score calculated which could range from 1 = low satisfaction to 5 = high satisfaction.

The FWS assessed unhappy couple relationship with a question asking 'Which best describes the degree of happiness, all things considered, in your relationship?'. Participants responded; Happy relationship ('Happy, Very happy, Extremely happy, Perfectly happy') or Unhappy relationship ('Extremely unhappy, Fairly unhappy, A little unhappy').

*Self-rated parenting quality*

Self-rated parenting quality was assessed by asking participants, 'Overall, as a parent, do you feel that you are…' on a five-point Likert-type scale ranging from 'not very good at being a parent' to 'a very good parent'. Responses were combined to create a variable indicating 'Not very good or some trouble at being a parent' versus 'An average, better than average or very good parent'. This item was taken from the Longitudinal Study of Australian Children [146].

*Head injury*

Head injuries were assessed using questions from the Ohio State University Traumatic Brain Injury Identification Method (OSU TBI-ID) [147], which was adapted by researchers for specific use in The Programme. Participants were asked if they had ever in their lifetime experienced any of five types of head injury;

- been hospitalised or treated in an emergency room following an injury to your head or neck

- injured your head or neck in a car accident or from a crash with another moving vehicle
- injured your head or neck in a fall or from being hit by something
- injured your head or neck in a fight, from being hit by someone, from being shaken violently, or being shot in the neck or head
- been nearby when an explosion or a blast occurred

Additionally, participants were asked whether they had ever lost consciousness from being choked.

*Injuries*

Participants were asked if they had ever experienced any of the following injuries that required time off work during your military career; fractures/broken bones, musculoskeletal injuries and burn injuries.

*Self-rated health*

Self-rated health was assessed by asking participants how their physical health has been over the past year. They responded on a five-point scale that was then dichotomised into ‘Excellent/Very good/Good’ vs. ‘Fair/Poor’.

*Pain severity*

Pain severity was assessed by asking participants ‘How would you rate your pain on a 0-10 scale at the present time, that is right now, where 0 = 'no pain' and 10 = 'pain as bad as could be'?’. This item was taken from the 2011 Australian Gulf War Veterans Health Study follow-up [148].

*Number of physical health conditions*

Items assessing physical health in the past month were taken from the 2011 Australian Gulf War Veterans Health Study follow-up [148]. This 67-item adapted version of self-report symptom questionnaire included respiratory, cardiovascular, musculoskeletal, dermatological, gastrointestinal, genitourinary, neurological and cognitive symptoms. Participants responded on a four-point Likert scale (‘No, Mild, Moderate, Severe’). The number of symptoms which were rated ‘Mild, Moderate or Severe’ were summed to create a total score.

*Concern about mental health*

Lifetime concern about mental health was assessed by asking participants whether they have ever been concerned about their mental health (e.g. stress, anxiety, depression, anger, relationship problems).

*Assistance for mental health in the last 12 months and ever*

Participants were asked if they had had assistance for their mental health; currently, in the last 12 months, or more than 12-months ago.

*Visited any health professional for your own health in the last 12 months*

Participants were asked which of a list of 18 health professionals they had visited or consulted for their own health in the past 12 months (excluding any time spent in hospital). Examples included

Outpatients section of a hospital, GP, Psychologist, Alcohol or drug worker, Physiotherapist, Naturopath. These items were taken from the CIDI [71] and adapted for use in the current study.

*Resources used to inform/mental health in the past 12 months*

Participants were asked which of a list of resources (websites, online treatments, apps, subscriptions/mailing lists, blogs, social media, websites and ex-service organisations) they have used in the last 12 months to inform/assess your mental health.

*Preferred means of receiving information about mental health*

A single item asked participants to indicate their preferred means of receiving information about their mental health. Options included via telephone, the internet or in person (face to face).

*Sought/received help from specific providers for MH problems*

Participants were asked if they had ever sought help/received help for your own mental health from a GP/Medical Officer, Psychologist, Psychiatrist, Other mental health professional including a social worker, occupational therapist, mental health nurse, Other providers including counsellor, complementary/alternative therapist (herbalist or naturopath), life coach, Inpatient treatment, hospital admission, hospital-based PTSD program, or residential alcohol and other drug program. These items were taken from 2011 Australian Gulf War Veterans Health Study follow-up [148].

*Reasons for seeking help*

Reasons for seeking help was assessed by asking participants first to indicate the primary or main reason that led them to seek care and then second to indicate any secondary reason(s) that led them to seek care. Examples included ‘anger’, ‘depression’ and ‘gambling’. These two questions were developed by researchers for specific use in the study.

## Appendix 3 – Supplementary analysis of WAST items.

Appendix 3 presents the item level analysis of the WAST items among transitioned and current serving personnel and partners of transitioned and current serving personnel.

Table A3.1. Frequencies of WAST items among transitioned personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 194 | 50.1 | 1225 | 49.6 | 1419 | 49.7 |
| Some tension | 170 | 43.9 | 1101 | 44.6 | 1271 | 44.5 |
| A lot of tension | 23 | 5.9 | 145 | 5.9 | 168 | 5.9 |
| **You and your partner work out arguments with:** | | | | | | |
| No difficulty | 202 | 52.3 | 1364 | 55.3 | 1566 | 54.9 |
| Some difficulty | 163 | 42.2 | 958 | 38.8 | 1121 | 39.3 |
| Great difficulty | 21 | 5.4 | 144 | 5.8 | 165 | 5.8 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 136 | 34.7 | 901 | 36.2 | 1037 | 36.0 |
| Rarely | 104 | 26.5 | 715 | 28.7 | 819 | 28.4 |
| Sometimes | 152 | 38.8 | 871 | 35.0 | 1023 | 35.6 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 362 | 92.3 | 2318 | 93.1 | 2680 | 93.0 |
| Rarely | 25 | 6.4 | 125 | 5.0 | 150 | 5.2 |
| Sometimes | 5 | 1.3 | 46 | 1.8 | 51 | 1.8 |
| **Do you ever feel frightened by what your partner says or does?** | | | | | | |
| Never | 333 | 84.9 | 2107 | 84.7 | 2440 | 84.7 |
| Rarely | 40 | 10.2 | 243 | 9.8 | 283 | 9.8 |
| Sometimes | 19 | 4.8 | 139 | 5.6 | 158 | 5.5 |
| **Has your partner ever abused you physically?** | | | | | | |
| Never | 385 | 98.2 | 2346 | 94.3 | 2731 | 94.8 |
| Rarely | 6 | 1.5 | 105 | 4.2 | 111 | 3.9 |
| Sometimes | 1 | 0.3 | 38 | 1.5 | 39 | 1.4 |
| **Has your partner ever abused you emotionally?** | | | | | | |
| Never | 314 | 80.1 | 1983 | 79.7 | 2297 | 79.7 |
| Rarely | 57 | 14.5 | 331 | 13.3 | 388 | 13.5 |
| Sometimes | 21 | 5.4 | 175 | 7.0 | 196 | 6.8 |
| **Has your partner ever abused you sexually?** | | | | | | |
| Never | 389 | 99.2 | 2471 | 99.3 | 2860 | 99.3 |
| Rarely | 3 | 0.8 | 11 | 0.4 | 14 | 0.5 |
| Sometimes | 0 | 0.0 | 7 | 0.3 | 7 | 0.2 |

Table A3.2. Frequencies of WAST items among current serving personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 636 | 58.4 | 2771 | 54.0 | 3407 | 54.7 |
| Some tension | 396 | 36.4 | 2157 | 42.0 | 2553 | 41.0 |
| A lot of tension | 57 | 5.2 | 207 | 4.0 | 264 | 4.2 |
| **You and your partner work out arguments with:** | | | | | | |
| No difficulty | 684 | 62.9 | 3075 | 59.9 | 3759 | 60.4 |
| Some difficulty | 359 | 33.0 | 1873 | 36.5 | 2232 | 35.9 |
| Great difficulty | 45 | 4.1 | 186 | 3.6 | 231 | 3.7 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 470 | 42.9 | 2166 | 42.1 | 2636 | 42.2 |
| Rarely | 321 | 29.3 | 1618 | 31.4 | 1939 | 31.0 |
| Sometimes | 304 | 27.8 | 1366 | 26.5 | 1670 | 26.7 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 1051 | 96.0 | 4924 | 95.6 | 5975 | 95.7 |
| Rarely | 40 | 3.6 | 175 | 3.4 | 215 | 3.4 |
| Sometimes | 4 | 0.4 | 52 | 1.0 | 56 | 0.9 |
| **Do you ever feel frightened by what your partner says or does?** | | | | | | |
| Never | 993 | 90.7 | 4558 | 88.5 | 5551 | 88.9 |
| Rarely | 65 | 5.9 | 427 | 8.3 | 492 | 7.9 |
| Sometimes | 37 | 3.4 | 166 | 3.2 | 203 | 3.3 |
| **Has your partner ever abused you physically?** | | | | | | |
| Never | 1071 | 97.8 | 4964 | 96.4 | 6035 | 96.6 |
| Rarely | 20 | 1.8 | 154 | 3.0 | 174 | 2.8 |
| Sometimes | 4 | 0.4 | 33 | 0.6 | 37 | 0.6 |
| **Has your partner ever abused you emotionally?** | | | | | | |
| Never | 933 | 85.2 | 4313 | 83.7 | 5246 | 84.0 |
| Rarely | 107 | 9.8 | 599 | 11.6 | 706 | 11.3 |
| Sometimes | 55 | 5.0 | 239 | 4.6 | 294 | 4.7 |
| **Has your partner ever abused you sexually?** | | | | | | |
| Never | 1093 | 99.8 | 5138 | 99.7 | 6231 | 99.8 |
| Rarely | 2 | 0.2 | 10 | 0.2 | 12 | 0.2 |
| Sometimes | 0 | 0.0 | 3 | 0.1 | 3 | 0.0 |

Table A3.3. Frequencies of collapsed WAST items among transitioned personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 194 | 50.1 | 1225 | 49.6 | 1419 | 49.7 |
| Some/A lot of tension | 193 | 49.9 | 1246 | 50.4 | 1439 | 50.3 |
| **You and your partner work out arguments with:** | | | | | | |
| No difficulty | 202 | 52.3 | 1364 | 55.3 | 1566 | 54.9 |
| Some/Great difficulty | 184 | 47.7 | 1102 | 44.7 | 1286 | 45.1 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 136 | 34.7 | 901 | 36.2 | 1037 | 36.0 |
| Rarely/Sometimes | 256 | 65.3 | 1586 | 63.8 | 1842 | 64.0 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 362 | 92.3 | 2318 | 93.1 | 2680 | 93.0 |
| Rarely/Sometimes | 30 | 7.7 | 171 | 6.9 | 201 | 7.0 |
| **Do you ever feel frightened by what your partner says or does?** | | | | | | |
| Never | 333 | 84.9 | 2107 | 84.7 | 2440 | 84.7 |
| Rarely/Sometimes | 59 | 15.1 | 382 | 15.3 | 441 | 15.3 |
| **Has your partner ever abused you physically?** | | | | | | |
| Never | 385 | 98.2 | 2346 | 94.3 | 2731 | 94.8 |
| Rarely/Sometimes | 7 | 1.8 | 143 | 5.7 | 150 | 5.2 |
| **Has your partner ever abused you emotionally?** | | | | | | |
| Never | 314 | 80.1 | 1983 | 79.7 | 2297 | 79.7 |
| Rarely/Sometimes | 78 | 19.9 | 506 | 20.3 | 584 | 20.3 |
| **Has your partner ever abused you sexually?** | | | | | | |
| Never | 389 | 99.2 | 2471 | 99.3 | 2860 | 99.3 |
| Rarely/Sometimes | 3 | 0.8 | 18 | 0.7 | 21 | 0.7 |

Table A3.4. Frequencies of collapsed WAST items among current serving personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 636 | 58.4 | 2771 | 54.0 | 3407 | 54.7 |
| Some/A lot of tension | 453 | 41.6 | 2364 | 46.0 | 2817 | 45.3 |
| **You and nominator work out arguments with:** | | | | | | |
| No difficulty | 684 | 62.9 | 3075 | 59.9 | 3759 | 60.4 |
| Some/Great difficulty | 404 | 37.1 | 2059 | 40.1 | 2463 | 39.6 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 470 | 42.9 | 2166 | 42.1 | 2636 | 42.2 |
| Rarely/Sometimes | 625 | 57.1 | 2984 | 57.9 | 3609 | 57.8 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 1051 | 96.0 | 4924 | 95.6 | 5975 | 95.7 |
| Rarely/Sometimes | 44 | 4.0 | 227 | 4.4 | 271 | 4.3 |
| **Do you ever feel frightened by what your partner says or does?** | | | | | | |
| Never | 993 | 90.7 | 4558 | 88.5 | 5551 | 88.9 |
| Rarely/Sometimes | 102 | 9.3 | 593 | 11.5 | 695 | 11.1 |
| **Has your partner ever abused you physically?** | | | | | | |
| Never | 1071 | 97.8 | 4964 | 96.4 | 6035 | 96.6 |
| Rarely/Sometimes | 24 | 2.2 | 187 | 3.6 | 211 | 3.4 |
| **Has your partner ever abused you emotionally?** | | | | | | |
| Never | 933 | 85.2 | 4313 | 83.7 | 5246 | 84.0 |
| Rarely/Sometimes | 162 | 14.8 | 838 | 16.3 | 1000 | 16.0 |
| **Has your partner ever abused you sexually?** | | | | | | |
| Never | 1093 | 99.8 | 5138 | 99.7 | 6231 | 99.8 |
| Rarely/Sometimes | 2 | 0.2 | 13 | 0.3 | 15 | 0.2 |

Table A3.5. Proportion of partners of transitioned and currently serving personnel reporting any IPV (excluding fear of partner), by gender.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **Partners of recently transitioned personnel** | 94 | 34.7 | 6 | 28.6 | 100 | 34.2 |
| **Partners of currently serving personnel** | 112 | 19.4 | 13 | 23.6 | 125 | 19.7 |

Table A3.6. Frequencies of WAST items among partners of transitioned personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 104 | 37.5 | 8 | 38.1 | 112 | 37.6 |
| Some tension | 152 | 54.9 | 13 | 61.9 | 165 | 55.4 |
| A lot of tension | 21 | 7.6 | 0 | 0.0 | 21 | 7.0 |
| **You and nominator work out arguments with:** | | | | | | |
| No difficulty | 131 | 47.5 | 12 | 57.1 | 143 | 48.1 |
| Some difficulty | 126 | 45.7 | 9 | 42.9 | 135 | 45.5 |
| Great difficulty | 19 | 6.9 | 0 | 0.0 | 19 | 6.4 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 79 | 28.7 | 6 | 28.6 | 85 | 28.7 |
| Sometimes | 159 | 57.8 | 13 | 61.9 | 172 | 58.1 |
| Often | 37 | 13.5 | 2 | 9.5 | 39 | 13.2 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 256 | 93.4 | 21 | 100 | 277 | 93.9 |
| Sometimes | 18 | 6.6 | 0 | 0.0 | 18 | 6.1 |
| Often | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| **Do you ever feel frightened by what nominator says or does?** | | | | | | |
| Never | 194 | 70.8 | 15 | 71.4 | 209 | 70.8 |
| Sometimes | 75 | 27.4 | 6 | 28.6 | 81 | 27.5 |
| Often | 5 | 1.8 | 0 | 0.0 | 5 | 1.7 |
| **Has nominator ever abused you physically?** | | | | | | |
| Never | 262 | 94.9 | 19 | 90.5 | 281 | 94.6 |
| Sometimes | 14 | 5.1 | 2 | 9.5 | 16 | 5.4 |
| Often | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| **Has nominator ever abused you emotionally?** | | | | | | |
| Never | 183 | 66.8 | 15 | 71.4 | 198 | 67.1 |
| Sometimes | 81 | 29.6 | 5 | 23.8 | 86 | 29.2 |
| Often | 10 | 3.6 | 1 | 4.8 | 11 | 3.7 |
| **Has nominator ever abused you sexually?** | | | | | | |
| Never | 271 | 98.9 | 20 | 95.2 | 291 | 98.6 |
| Sometimes | 3 | 1.1 | 1 | 4.8 | 4 | 1.4 |
| Often | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

Note: Nominator is the MHWTS respondent who nominated a family member to participate in the Family Wellbeing Study (FWS).

Table A3.7. Frequencies of WAST items among partners of current serving personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 273 | 45.9 | 22 | 38.6 | 295 | 45.2 |
| Some tension | 304 | 51.1 | 30 | 52.6 | 334 | 51.2 |
| A lot of tension | 18 | 3.0 | 5 | 8.8 | 23 | 3.5 |
| **You and nominator work out arguments with:** | | | | | | |
| No difficulty | 332 | 55.7 | 32 | 55.2 | 364 | 55.7 |
| Some difficulty | 247 | 41.4 | 21 | 36.2 | 268 | 41.0 |
| Great difficulty | 17 | 2.9 | 5 | 8.6 | 22 | 3.4 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 202 | 33.9 | 18 | 32.1 | 220 | 33.8 |
| Sometimes | 346 | 58.2 | 30 | 53.6 | 376 | 57.8 |
| Often | 47 | 7.9 | 8 | 14.3 | 55 | 8.4 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 583 | 98.5 | 56 | 98.2 | 639 | 98.5 |
| Sometimes | 9 | 1.5 | 1 | 1.8 | 10 | 1.5 |
| Often | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| **Do you ever feel frightened by what nominator says or does?** | | | | | | |
| Never | 523 | 88.2 | 48 | 82.8 | 571 | 87.7 |
| Sometimes | 67 | 11.3 | 9 | 15.5 | 76 | 11.7 |
| Often | 3 | 0.5 | 1 | 1.7 | 4 | 0.6 |
| **Has nominator ever abused you physically?** | | | | | | |
| Never | 577 | 98.8 | 55 | 96.5 | 632 | 98.6 |
| Sometimes | 7 | 1.2 | 2 | 3.5 | 9 | 1.4 |
| Often | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| **Has nominator ever abused you emotionally?** | | | | | | |
| Never | 482 | 81.6 | 46 | 80.7 | 528 | 81.5 |
| Sometimes | 99 | 16.8 | 8 | 14.0 | 107 | 16.5 |
| Often | 10 | 1.7 | 3 | 5.3 | 13 | 2 |
| **Has nominator ever abused you sexually?** | | | | | | |
| Never | 589 | 99.2 | 57 | 98.3 | 646 | 99.1 |
| Sometimes | 4 | 0.7 | 1 | 1.7 | 5 | 0.8 |
| Often | 1 | 0.2 | 0 | 0.0 | 1 | 0.2 |

Note: Nominator is the MHWTS respondent who nominated a family member to participate in the Family Wellbeing Study (FWS).

Table A3.8. Frequencies of collapsed WAST items among partners of transitioned personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 104 | 37.5 | 8 | 38.1 | 112 | 37.6 |
| Some/A lot of tension | 173 | 62.5 | 13 | 61.9 | 186 | 62.4 |
| **You and nominator work out arguments with:** | | | | | | |
| No difficulty | 131 | 47.5 | 12 | 57.1 | 143 | 48.1 |
| Some/Great difficulty | 145 | 52.5 | 9 | 42.9 | 154 | 51.9 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 79 | 28.7 | 6 | 28.6 | 85 | 28.7 |
| Sometimes/Often | 196 | 71.3 | 15 | 71.4 | 211 | 71.3 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 256 | 93.4 | 21 | 100 | 277 | 93.9 |
| Sometimes/Often | 18 | 6.6 | 0 | 0 | 18 | 6.1 |
| **Do you ever feel frightened by what nominator says or does?** | | | | | | |
| Never | 194 | 70.8 | 15 | 71.4 | 209 | 70.8 |
| Sometimes/Often | 80 | 29.2 | 6 | 28.6 | 86 | 29.2 |
| **Has nominator ever abused you physically?** | | | | | | |
| Never | 262 | 94.9 | 19 | 90.5 | 281 | 94.6 |
| Sometimes/Often | 14 | 5.1 | <5 | - | 16 | 5.4 |
| **Has nominator ever abused you emotionally?** | | | | | | |
| Never | 183 | 66.8 | 15 | 71.4 | 198 | 67.1 |
| Sometimes/Often | 91 | 33.2 | 6 | 28.6 | 97 | 32.9 |
| **Has nominator ever abused you sexually?** | | | | | | |
| Never | 271 | 98.9 | 20 | 95.2 | 291 | 98.6 |
| Sometimes/Often | <5 | - | <5 | - | <5 | - |

Note: Nominator is the MHWTS respondent who nominated a family member to participate in the Family Wellbeing Study (FWS).

Table A3.9. Frequencies of collapsed WAST items among partners of current serving personnel.

| | Female | | Male | | Total | |
|---|---|---|---|---|---|---|
| | n | % | n | % | n | % |
| **In general, how would you describe your relationship?** | | | | | | |
| No tension | 273 | 45.9 | 22 | 38.6 | 295 | 45.2 |
| Some/a lot of tension | 322 | 54.1 | 35 | 61.4 | 357 | 54.8 |
| **You and nominator work out arguments with:** | | | | | | |
| No difficulty | 332 | 55.7 | 32 | 55.2 | 364 | 55.7 |
| Some/great difficulty | 264 | 44.3 | 26 | 44.8 | 290 | 44.3 |
| **Do arguments ever result in you feeling down or bad about yourself?** | | | | | | |
| Never | 202 | 33.9 | 18 | 32.1 | 220 | 33.8 |
| Sometimes/often | 393 | 66.1 | 38 | 67.9 | 431 | 66.2 |
| **Do arguments ever result in hitting, kicking or pushing?** | | | | | | |
| Never | 583 | 98.5 | 56 | 98.2 | 639 | 98.5 |
| Sometimes/often | 9 | 1.5 | 1 | 1.8 | 10 | 1.5 |
| **Do you ever feel frightened by what nominator says or does?** | | | | | | |
| Never | 523 | 88.2 | 48 | 82.8 | 571 | 87.7 |
| Sometimes/often | 70 | 11.8 | 10 | 17.2 | 80 | 12.3 |
| **Has nominator ever abused you physically?** | | | | | | |
| Never | 577 | 98.8 | 55 | 96.5 | 632 | 98.6 |
| Sometimes/often | 7 | 1.2 | 2 | 3.5 | 9 | 1.4 |
| **Has nominator ever abused you emotionally?** | | | | | | |
| Never | 482 | 81.6 | 46 | 80.7 | 528 | 81.5 |
| Sometimes/often | 109 | 18.4 | 11 | 19.3 | 120 | 18.5 |
| **Has nominator ever abused you sexually?** | | | | | | |
| Never | 589 | 99.2 | 57 | 98.3 | 646 | 99.1 |
| Sometimes/often | 5 | 0.8 | 1 | 1.7 | 6 | 0.9 |

Note: Nominator is the MHWTS respondent who nominated a family member to participate in the Family Wellbeing Study (FWS).

Table A3.10. Frequencies of co-occurring IPV by subtype as reported by transitioned members and their partners.

| | | Transitioned member report of IPV exposure | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | No IPV | | Physical IPV only | | Emotional IPV only | | Combined emotional + physical IPV | |
| | | n | % | n | % | n | % | n | % |
| Partner report of IPV exposure | No IPV | 113 | 44.1 | 2 | 0.8 | 20 | 7.8 | 3 | 1.2 |
| | Physical IPV only | 0 | 0.0 | 0 | 0.0 | 1 | 0.4 | 1 | 0.4 |
| | Emotional IPV only | 57 | 22.3 | 3 | 1.2 | 27 | 10.6 | 8 | 3.1 |
| | Combined emotional + physical IPV | 6 | 2.3 | 2 | 0.8 | 7 | 2.7 | 6 | 2.3 |

Notes: There were no partners or transitioned members in this sub-sample reporting 'sexual only' or 'physical and sexual' IPV. A small number of partners (n=3) reported 'emotional and sexual IPV' and were included in the 'Combined emotional + physical' category. One transitioned member reported exposure to all types of IPV and was included in the 'emotional and physical or sexual' category. These data were derived from the linked couples' sample where both partners provided valid responses to WAST items.

## Appendix 4 – Supplementary analyses of currently serving personnel and partners of current serving personnel, including (a) risk/protective factors for self-reported IPV exposure and (b) mental health/psychosocial implications of exposure.

Table A4.1. Bivariate logistic regression models indicating **socio-demographic** predictors of any self-reported IPV exposure among current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Age group (years)** | | | | | | |
| 18-27 | 50 | 14.0 | | | | |
| 29-37 | 350 | 19.7 | 1.51 | 1.11 | 2.11 | 0.01 |
| 38-47 | 585 | 25.4 | 2.10 | 1.55 | 2.89 | <0.001 |
| 48-57 | 389 | 23.2 | 1.85 | 1.36 | 2.57 | <0.001 |
| 58+ | 31 | 19.0 | 1.44 | 0.87 | 2.35 | 0.15 |
| **Gender** | | | | | | |
| Male | 1210 | 23.0 | | | | |
| Female | 221 | 20.0 | 0.82 | 0.70 | 0.97 | 0.02 |
| **Relationship status** | | | | | | |
| Not in a relationship | 13 | 28.8 | | | | |
| In a relationship, not living together | 210 | 22.1 | 0.70 | 0.37 | 1.40 | 0.29 |
| In a relationship and living together | 1194 | 22.5 | 0.72 | 0.38 | 1.42 | 0.31 |
| **Education** | | | | | | |
| Primary or Secondary school | 308 | 22.0 | | | | |
| Certificate or Diploma | 619 | 24.4 | 1.14 | 0.98 | 1.34 | 0.09 |
| University | 490 | 20.8 | 0.93 | 0.79 | 1.09 | 0.36 |

Table A4.2. Bivariate logistic regression models indicating **socio-demographic** predictors of any self-reported IPV exposure among partners of current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Age group (years)** | | | | | | |
| 18-37 | 39 | 19.0 | | | | |
| 38-47 | 63 | 25.5 | 1.46 | 0.93 | 2.29 | 0.10 |
| 48+ | 50 | 27.8 | 1.64 | 1.02 | 2.64 | 0.04 |
| Gender | | | | | | |
| Male | 16 | 28.6 | | | | |
| Female | 136 | 23.6 | 0.77 | 0.42 | 1.42 | 0.41 |
| **Live with ADF nominator** | | | | | | |
| No | 19 | 27.9 | | | | |
| Yes | 133 | 23.6 | 0.80 | 0.45 | 1.40 | 0.43 |
| **Education** | | | | | | |
| Primary or Secondary school | 29 | 25.9 | 1.21 | 0.73 | 2.01 | 0.45 |
| Certificate or Diploma | 57 | 25.3 | 1.18 | 0.78 | 1.77 | 0.43 |
| University | 66 | 22.4 | | | | |
| **Employment status** | | | | | | |
| Full/part time paid work | 100 | 22.9 | | | | |
| Unemployed | 29 | 34.1 | 1.75 | 1.06 | 2.88 | 0.03 |
| Other (student, unpaid work) | 23 | 20.9 | 0.89 | 0.53 | 1.48 | 0.66 |
| **Main source of income** | | | | | | |
| Paid employment | 74 | 25.3 | | | | |
| Other (includes partner income) | 78 | 22.9 | 0.88 | 0.61 | 1.26 | 0.48 |

Table A4.3. Bivariate logistic regression models indicating **family-related** predictors of any self-reported IPV exposure among current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Household structure** | | | | | | |
| Person living alone | 57 | 18.4 | | | | |
| Couple living alone | 224 | 17.2 | 0.92 | 0.67 | 1.27 | 0.60 |
| Couple with child(ren) | 977 | 24.5 | 1.44 | 1.08 | 1.94 | 0.01 |
| Married with dependents unaccompanied | 107 | 23.2 | 1.34 | 0.94 | 1.92 | 0.11 |
| Single parent with child(ren) | 27 | 25.7 | 1.53 | 0.89 | 2.56 | 0.11 |
| Other household type | 26 | 19.8 | 1.09 | 0.64 | 1.81 | 0.73 |
| **Children** | | | | | | |
| No | 260 | 16.7 | | | | |
| Yes | 1153 | 24.4 | 1.60 | 1.38 | 1.86 | <0.001 |
| **Spouse / partner affiliated with ADF** | | | | | | |
| No | 986 | 23.0 | | | | |
| Yes | 419 | 21.3 | 0.91 | 0.80 | 1.03 | 0.15 |

Table A4.4. Bivariate logistic regression models indicating **family-related** predictors of any self-reported IPV exposure among partners of current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Household structure** | | | | | | |
| Couple living alone | 18 | 17.3 | | | | |
| Couple with child(ren) | 112 | 25.2 | 1.61 | 0.93 | 2.80 | 0.09 |
| Other household type (includes not living with nominator) | 22 | 26.2 | 1.70 | 0.84 | 3.43 | 0.14 |
| **Children with ADF nominator** | | | | | | |
| No | 16.8 | 16.8 | | | | |
| Yes | 25.6 | 25.6 | 1.70 | 1.00 | 2.90 | 0.049 |
| **Length of relationship** | | | | | | |
| <10 years | 28 | 15.8 | | | | |
| 10-19 years | 59 | 26.8 | 1.95 | 1.18 | 3.22 | 0.01 |
| 20+ | 62 | 27.9 | 2.06 | 1.25 | 3.40 | <0.001 |
| **Number of people in household** | | | | | | |
| 1-2 | 35 | 20.2 | | | | |
| 3 | 35 | 25.7 | 1.37 | 0.80 | 2.33 | 0.25 |
| 4 | 50 | 23.9 | 1.24 | 0.76 | 2.02 | 0.39 |
| 5+ | 32 | 28.1 | 1.54 | 0.89 | 2.67 | 0.13 |

Table A4.5. Bivariate logistic regression models indicating **service-related** predictors of any self-reported IPV exposure among current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Service** | | | | | | |
| Army | 645 | 24.3 | | | | |
| Navy | 322 | 21.5 | 0.85 | 0.73 | 0.99 | 0.03 |
| Air Force | 464 | 20.7 | 0.81 | 0.71 | 0.93 | 0.002 |
| **Rank** | | | | | | |
| Commissioned Officer | 562 | 20.2 | | | | |
| NCO/Other ranks | 869 | 24.1 | 1.26 | 1.12 | 1.42 | <0.001 |
| **Time served in Regular ADF** | | | | | | |
| 0-4 years | 20 | 12.3 | | | | |
| 5-9 years | 180 | 18.9 | 1.65 | 1.03 | 2.79 | 0.04 |
| 10-19 years | 521 | 22.5 | 2.07 | 1.31 | 3.43 | 0.002 |
| 20+ years | 697 | 24.2 | 2.27 | 1.44 | 3.77 | <0.001 |
| **Ever deployed** | | | | | | |
| No | 147 | 16.9 | | | | |
| Yes | 1284 | 23.3 | 1.49 | 1.24 | 1.81 | <0.001 |
| **Traumatic deployment exposures** | | | | | | |
| Very low (<=4) | 556 | 18.6 | | | | |
| Low (5-12) | 365 | 23.7 | 1.36 | 1.17 | 1.58 | <0.001 |
| Medium (13-22) | 307 | 27.7 | 1.68 | 1.43 | 1.97 | <0.001 |
| High (23-31) | 122 | 26.5 | 1.58 | 1.25 | 1.98 | <0.001 |
| Very High (32-48) | 80 | 29.5 | 1.83 | 1.38 | 2.41 | <0.001 |

Table A4.6. Bivariate logistic regression models indicating **service-related** predictors of any self-reported IPV exposure among partners of current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Respondent part of ADF / transitioned** | | | | | | |
| No | 120 | 23.0 | | | | |
| Yes | 32 | 29.1 | 1.37 | 0.87 | 2.18 | 0.17 |
| **Nominator ever deployed**[1] | | | | | | |
| Never deployed | 16 | 16.5 | | | | |
| Deployed | 134 | 25.3 | 1.73 | 0.98 | 3.06 | 0.06 |
| **Respondent relocations due to nominator's service** | | | | | | |
| 0 | 17 | 34.0 | | | | |
| 1-2 | 20 | 16.7 | 0.39 | 0.18 | 0.83 | 0.01 |
| 3+ | 97 | 26.6 | 0.71 | 0.38 | 1.32 | 0.28 |
| **Respondent parental history with ADF** | | | | | | |
| No | 113 | 21.9 | | | | |
| Yes | 39 | 34.5 | 1.88 | 1.21 | 2.93 | 0.01 |

[1] FWS respondent report

Table A4.7. Bivariate logistic regression models indicating **psychosocial** predictors of any self-reported IPV exposure among current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Social support (M, SD)** | | | | | | |
| Family | | | | | | |
| Affective support | 4.80 | 1.37 | 0.62 | 0.59 | 0.65 | <0.001 |
| Negative interactions | 5.08 | 2.07 | 1.57 | 1.51 | 1.62 | <0.001 |
| Friends | | | | | | |
| Affective support | 3.84 | 1.53 | 0.77 | 0.74 | 0.80 | <0.001 |
| Negative interactions | 2.42 | 1.69 | 1.18 | 1.13 | 1.22 | <0.001 |
| **Relationship satisfaction (M, SD)** | 6.34 | 2.41 | 0.64 | 0.62 | 0.66 | <0.001 |
| **ADF sense of identity (M, SD)** | 14.47 | 3.49 | 0.97 | 0.95 | 0.99 | <0.001 |

Table A4.8. Bivariate logistic regression models indicating **psychosocial** predictors of any self-reported IPV exposure among current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Financial problems** | | | | | | |
| Current financial status | | | | | | |
| Just getting along/ Poor/Very poor | 472 | 23 | | | | |
| Prosperous/Very comfortable/Reasonably comfortable | 994 | 19.7 | 0.53 | 0.47 | 0.61 | <0.001 |
| Current financial hardship (trouble paying money owed) | | | | | | |
| No | 1211 | 21.1 | | | | |
| Yes | 200 | 35.9 | 2.08 | 1.73 | 2.50 | <0.001 |
| Major financial crisis in last 12 months | | | | | | |
| No | 1315 | 21.5 | | | | |
| Yes | 112 | 45.9 | 3.09 | 2.38 | 4.01 | <0.001 |
| **Housing stability** | | | | | | |
| Living in stable housing in past two months | | | | | | |
| No | 39 | 26 | | | | |
| Yes | 1370 | 22.4 | 0.82 | 0.57 | 1.20 | 0.299 |
| Concern may not have stable housing in next two months | | | | | | |
| No | 1325 | 21.9 | | | | |
| Yes | 90 | 37 | 2.09 | 1.59 | 2.73 | <0.001 |
| **Employment instability** | | | | | | |
| Sacked from job in last 12 months | | | | | | |
| No | 1410 | 22.3 | | | | |
| Yes | 14 | 32.5 | 1.67 | 0.85 | 3.11 | 0.11 |
| Became unemployed or were seeking work unsuccessfully for more than one month in the last 12 months | | | | | | |
| No | 1400 | 22.3 | | | | |
| Yes | 24 | 31.5 | 1.60 | 0.97 | 2.58 | 0.06 |
| **Lifetime trauma exposure** | | | | | | |
| 0-1 traumas | 416 | 15.9 | | | | |
| 2-3 traumas | 420 | 22.8 | 1.56 | 1.34 | 1.81 | <0.001 |
| 4+ traumas | 589 | 31 | 2.37 | 2.05 | 2.73 | <0.001 |

Table A4.9. Bivariate logistic regression models indicating **psychosocial** predictors of any self-reported IPV exposure among partners of current serving personnel.

| | IPV Frequencies | | Logistic Regression | | | |
|---|---|---|---|---|---|---|
| | *n* | % | OR | 95% CI | | p |
| | | | | LB | UB | |
| **Financial hardship** | | | | | | |
| Current financial hardship (trouble paying money owed) | | | | | | |
| No | 115 | 21.4 | | | | |
| Yes | 23 | 41.8 | 2.64 | 1.49 | 4.68 | <0.01 |
| **Homelessness** (ever without a permanent place to live) | | | | | | |
| No | 119 | 23.6 | | | | |
| Yes | 33 | 25.8 | 1.12 | 0.72 | 1.76 | 0.61 |
| **Number of close friends** | | | | | | |
| 3+ | 79 | 19.6 | | | | |
| 0-2 | 65 | 31.3 | 1.87 | 1.28 | 2.74 | <0.01 |
| | | | | | | |
| **Relationship satisfaction (M, SD, Beta)** | 3.63 | 0.83 | 0.22 | 0.16 | 0.30 | <0.001 |
| **Lifetime trauma exposure** | | | | | | |
| 0-1 | 63 | 18.3 | | | | |
| 2-3 | 50 | 24.0 | 1.42 | 0.93 | 2.15 | 0.10 |
| 4+ | 34 | 47.9 | 4.11 | 2.40 | 7.06 | <0.001 |

Table A4.10. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **mental health outcomes** among current serving personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV (n = 4842) | | Any IPV (n = 1404) | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI | | p | OR | 95% CI | | p |
| | | | | | | LB | UB | | | LB | UB | |
| **PTSD (PCL-C ≥30)** | 646 | 13.1 | 472 | 33.2 | 3.28 | 2.85 | 3.76 | <0.001 | 3.26 | 2.83 | 3.76 | <0.001 |
| **Depression (PHQ ≥10)** | 521 | 10.6 | 357 | 25.1 | 2.83 | 2.43 | 3.28 | <0.001 | 2.83 | 2.42 | 3.30 | <0.001 |
| **High psychological distress (K10 ≥20)** | 760 | 15.4 | 451 | 31.6 | 2.54 | 2.21 | 2.91 | <0.001 | 2.59 | 2.25 | 2.97 | <0.001 |
| **Harmful drinking (AUDIT ≥16)** | 95 | 1.9 | 71 | 4.9 | 2.66 | 1.94 | 3.64 | <0.001 | 2.66 | 1.92 | 3.66 | <0.001 |
| **Alcohol dependence (AUDIT ≥20)** | 37 | 0.7 | 25 | 1.8 | 2.35 | 1.4 | 3.91 | <0.001 | 2.40 | 1.42 | 3.99 | <0.001 |
| **Problem anger (DAR ≥12)** | 472 | 9.5 | 348 | 24.4 | 3.04 | 2.61 | 3.55 | <0.001 | 3.21 | 2.73 | 3.76 | <0.001 |
| **Problem gambling (PGSI ≥3)** | 107 | 2.2 | 69 | 4.9 | 2.27 | 1.66 | 3.09 | <0.001 | 2.33 | 1.70 | 3.18 | <0.001 |

[1] Adjusted for age, gender and education level.

Table A4.11. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **mental health outcomes**[1] among partners of current serving personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV (n = 480) | | Any IPV (n = 152) | | Unadjusted | | | | Adjusted[2] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **PTSD (PCL-C ≥30)** | 73 | 15.4 | 50 | 34.5 | 2.89 | 1.89 | 4.42 | <0.001 | 2.78 | 1.80 | 4.29 | <0.001 |
| **High psychological distress (K10 ≥20)** | 73 | 15.4 | 55 | 38.5 | 3.42 | 2.25 | 5.21 | <0.001 | 3.40 | 2.23 | 5.20 | <0.001 |

[1]Analysis for AUDIT and PGSI are not presented due to cell size <5; [2] Adjusted for age, gender and education level.

Table A4.12. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **psychosocial outcomes** among current serving personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV (n = 4842) | | Any IPV (n = 1404) | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Suicide ideation** | 344 | 7.1 | 259 | 19 | 3.07 | 2.58 | 3.66 | <0.001 | 3.19 | 2.66 | 3.81 | <0.001 |
| **Suicide plan** | 60 | 1.2 | 53 | 3.7 | 3.14 | 2.15 | 4.56 | <0.001 | 3.09 | 2.11 | 4.50 | <0.001 |
| **Sleep disturbance (ISI ≥15+)** | 354 | 7.3 | 231 | 16.7 | 2.53 | 2.12 | 3.02 | <0.001 | 2.47 | 2.05 | 2.96 | <0.001 |
| **Aggression** | 152 | 3.1 | 145 | 10.2 | 3.57 | 2.81 | 4.52 | <0.001 | 3.60 | 2.82 | 4.59 | <0.001 |
| **Contact with the law (last 12 months)** | 50 | 1.1 | 37 | 2.6 | 2.59 | 1.67 | 3.97 | <0.001 | 2.49 | 1.59 | 3.88 | <0.001 |
| **Relationship breakdown** | 278 | 5.6 | 176 | 12.3 | 2.35 | 1.92 | 2.87 | <0.001 | 2.33 | 1.90 | 2.86 | <0.001 |
| **Relationship problems** | 641 | 13 | 653 | 45.8 | 5.56 | 4.94 | 6.45 | <0.001 | 5.84 | 5.09 | 6.70 | <0.001 |
| **Self-rated parenting quality (Average/better than average/very** | 225 | 6.3 | 151 | 13.2 | 2.25 | 1.80 | 2.79 | <0.001 | 2.27 | 1.82 | 2.82 | <0.001 |

[1] Adjusted for age, gender and education level.

Table A4.13. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **psychosocial outcomes** among partners of current serving personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV (n = 480) | | Any IPV (n = 152) | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Suicide ideation** | 36 | 7.6 | 34 | 23.6 | 3.73 | 2.24 | 6.24 | <0.001 | 3.69 | 2.19 | 6.21 | <0.001 |
| **Relationship unhappiness** | 83 | 17.3 | 49 | 32.2 | 2.28 | 1.50 | 3.44 | <0.001 | 2.27 | 1.49 | 3.46 | <0.001 |

[1] Adjusted for age, gender and education level.

Table A4.14. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **health outcomes** among current serving personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV (n = 4842) | | Any IPV (n = 1404) | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Ever had a head injury** | 3000 | 63.3 | 1018 | 74 | 1.64 | 1.44 | 1.88 | <0.001 | 1.61 | 1.40 | 1.85 | <0.001 |
| **Lost consciousness from being choked** | 91 | 3 | 33 | 3.2 | 1.07 | 0.71 | 1.59 | 0.73 | 1.14 | 0.74 | 1.71 | 0.54 |
| **Injuries requiring time off work during your military career** | | | | | | | | | | | | |
| Fractures/broken bones | 1453 | 30.8 | 466 | 34.3 | 1.17 | 1.02 | 1.32 | 0.01 | 1.14 | 0.99 | 1.30 | 0.05 |
| Musculoskeletal injuries | 2987 | 63.1 | 984 | 71.9 | 1.49 | 1.31 | 1.71 | <0.001 | 1.43 | 1.25 | 1.64 | <0.001 |
| Burn injuries | 126 | 2.6 | 57 | 4.2 | 1.58 | 1.14 | 2.17 | 0.004 | 1.51 | 1.08 | 2.08 | 0.01 |
| **Self-rated health** | | | | | | | | | | | | |
| Excellent/Very good/Good | 4012 | 82.9 | 975 | 69.6 | | | | | | | | |
| Fair/Poor | 824 | 17.1 | 426 | 30.4 | 2.12 | 1.85 | 2.42 | <0.001 | 2.09 | 1.82 | 2.40 | <0.001 |
| **Pain severity (M, SD, Beta)** | 1.58 | 1.87 | 2.15 | 2.08 | 0.12 | 0.10 | 0.15 | <0.001 | 0.11 | 0.09 | 0.14 | <0.001 |
| **Number of health conditions (M, SD, Beta)** | 2.43 | 1.56 | 3.42 | 1.72 | 0.26 | 0.23 | 0.28 | <0.001 | 0.25 | 0.23 | 0.28 | <0.001 |

[1] Adjusted for age, gender and education level.

Table A4.15. Bivariate logistic regression models indicating any self-reported IPV exposure as a predictor of **health outcomes** among partners of current serving personnel.

| | Frequencies | | | | Logistic regression models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No IPV (n = 480) | | Any IPV (n = 152) | | Unadjusted | | | | Adjusted[1] | | | |
| | n | % | n | % | OR | 95% CI LB | 95% CI UB | p | OR | 95% CI LB | 95% CI UB | p |
| **Self-rated health** | | | | | | | | | | | | |
| Excellent/Very good/Good | 301 | 62.7 | 73 | 48.3 | | | | | | | | |
| Fair/Poor | 179 | 37.3 | 78 | 51.7 | 1.80 | 1.24 | 2.60 | <0.01 | 1.81 | 1.24 | 2.64 | <0.01 |

[1] Adjusted for age, gender and education level.

## Appendix 5 – Moderation of the Relationship between self-reported IPV Exposure and PTSD Symptoms.

A series of moderation analyses were undertaken to examine whether the strength of association between self-reported IPV exposure and PTSD symptoms (measured by PCL scores) differed across levels of theoretically defensible moderator variables. Potential moderator variables included: general stress, lifetime traumatic experiences, support from friends, support from family, economic instability and whether the couple had children. Theoretical justification for the selection of moderator variables is presented in Appendix 6.

Moderation was tested by adding an IPV*Moderator interaction term to a linear regression model predicting PCL score that also included the main effects of IPV and the given moderator. A positive and statistically significant interaction term indicates that individuals with a higher score on the moderator have a stronger relationship between IPV and PCL score, whereas a negative coefficient indicates that higher scores on the moderator are associated with a weaker relationship between IPV and PCL score. Tables A4.1-4.6 below present the results of these analyses. Unstandardised betas are reported for all coefficients.

Table A5.1. Analysis of whether the relationship between self-reported IPV exposure and PTSD symptoms (PCL scores) is moderated by general stress (number of recent life events).

| | **Estimate** | **Std. Error** | **t** | **p** |
|---|---|---|---|---|
| **Recent Life Events** | 3.74 | 0.21 | 17.50 | <0.001 |
| **IPV Exposure** | 5.06 | 0.85 | 5.98 | <0.001 |
| **IPV Exposure * Recent Life Events** | 0.78 | 0.32 | 2.41 | 0.016 |

Table A5.2. Analysis of whether the relationship between self-reported IPV exposure and PTSD symptoms (PCL scores) is moderated by lifetime trauma.

| | **Estimate** | **Std. Error** | **t** | **p** |
|---|---|---|---|---|
| **Lifetime Trauma** | 2.16 | 0.11 | 19.19 | <0.001 |
| **IPV Exposure** | 5.60 | 0.91 | 6.18 | <0.001 |
| **IPV Exposure * Lifetime Trauma** | 0.57 | 0.18 | 3.12 | 0.002 |

Table A5.3. Analysis of whether the relationship between self-reported IPV exposure and PTSD symptoms (PCL scores) is moderated by friend support.

| | **Estimate** | **Std. Error** | **t** | **p** |
|---|---|---|---|---|
| **Friend Support** | -1.75 | 0.16 | -10.87 | <0.001 |
| **IPV Exposure** | 17.81 | 3.06 | 5.82 | <0.001 |
| **IPV Exposure * Friend Support** | -0.86 | 0.28 | -3.04 | 0.002 |

Table A5.4. Analysis of whether the relationship between self-reported IPV exposure and PTSD symptoms (PCL scores) is moderated by family support.

| | Estimate | Std. Error | t | p |
|---|---|---|---|---|
| **Family Support** | -1.44 | 0.14 | -10.35 | <0.001 |
| **IPV Exposure** | 10.67 | 2.22 | 4.80 | <0.001 |
| **IPV Exposure * Family Support** | -0.42 | 0.23 | -1.86 | 0.060 |

Table A5.5. Analysis of whether the relationship between self-reported IPV exposure and PTSD symptoms (PCL scores) is moderated by economic instability.

| | Estimate | Std. Error | t | p |
|---|---|---|---|---|
| **Economic instability** | 5.58 | 0.41 | 13.57 | <0.001 |
| **IPV Exposure** | 0.94 | 2.50 | 0.38 | 0.710 |
| **IPV Exposure * Economic Instability** | 2.44 | 0.74 | 3.30 | <0.001 |

Table A5.6. Analysis of whether the relationship between self-reported IPV exposure and PTSD symptoms (PCL scores) is moderated by whether the couple had children.

| | Estimate | Std. Error | t | p |
|---|---|---|---|---|
| **Children** | -0.50 | 0.78 | -0.64 | 0.524 |
| **IPV Exposure** | 9.43 | 1.47 | 6.40 | <0.001 |
| **IPV Exposure * Children** | 1.70 | 1.65 | 1.03 | 0.301 |

## Appendix 6 – Selection of moderator variables associated with self-reported IPV exposure and PTSD symptoms.

The moderator variables for these analyses were selected based on evidence suggesting these constructs could play important roles in either weakening or strengthening the relationship between self-reported IPV exposure and PTSD symptoms. A brief review of the evidence is provided below.

First, greater lifetime frequency of **traumatic events** are associated with higher level of PTSD symptoms, suggesting a cumulative impact of these experiences on mental health outcomes [149, 150] — a finding that has been observed in veteran populations [151]. Additionally, in a prospective study of National Guard troops in the U.S., more **stressful events**, both before and after deployment to Iraq, were associated with greater risk of developing PTSD [152].

Second, the **loss of material and psychosocial resources**—operationalised in this study as **economic instability**—has been identified as both a precursor to and potential consequence of PTSD symptoms, suggesting a possible cyclical association between resources loss and PTSD symptoms, such that as losses rise, symptoms rise and vice versa [153, 154]. Furthermore, controlling resources loss has also been related to the alleviation of PTSD symptoms [153]. These associations suggest an important moderating role of resource loss in PTSD. In examining this moderating role, [155] showed that recent global resources loss strengthened the association between childhood abuse and current PTSD symptoms amongst women attending primary care services.

Conversely, the presence of resources, such as those provided through **perceived social support**, (operationalised in this study as **social support from family and friends**) have been shown to be protective against the detrimental mental health effects of intimate partner violence [156]. Research has demonstrated positive well-being outcomes among IPV victims with high social support. For example, it was found that IPV-exposed women with greater perceived social support were less likely to attempt suicide than IPV-exposed women with less social support [47]. Furthermore, IPV-exposed women with greater social support were found to have fewer mental health problems and suicidal thoughts than those who had less social support [157]. The protective nature of perceived social support on psychological distress in the context of IPV has also been demonstrated in military contexts. Specifically, in a study of spouses of Canadian Armed Forces personnel, perceived social support buffered the negative impact of emotional violence on psychological distress—spouses who perceived social networks to be more supportive had lower psychological distress even if they were the victims of emotional IPV [28].

Finally, it was also considered that a couple **having children**, who may witness or be adversely affected by intimate partner violence, may elevate distress amongst victim-survivors, increasing their risk of developing PTSD symptoms.

## Appendix 7 – Logistic Regression Power Analyses.

A series of power analyses for logistic regression models were conducted using the R package WebPower (0.8.6). Results of these are presented in Table A7.1, which summarises the estimated power (**β**) to detect a given OR across samples which were all fixed in size. In general, both studies were adequately (>80%) powered to detect ORs of 1.35 or above, which are small-to-medium in magnitude. The larger sample size in the MHWTS provided adequate power to detect associations as small as OR = 1.15. The linked couples' analytic subset of the FWS study was well powered to detect larger effects (OR >1.55) due to its smaller sample size.

Table A7.1. Estimated power (**β**) to detect Odds Ratios (ORs) across the three samples.

| **Power Analyses** | **MHWTS n = 6,246 Power (β)** | **FWS Total Sample n = 632 Power (β)** | **Couples' dataset n = 266 Power (β)** |
|---|---|---|---|
| **OR = 1.1** | 0.75 | 0.13 | 0.08 |
| **OR = 1.15** | 0.97 | 0.24 | 0.13 |
| **OR = 1.2** | 0.99 | 0.38 | 0.19 |
| **OR = 1.25** | 0.99 | 0.55 | 0.27 |
| **OR = 1.3** | 1.00 | 0.70 | 0.37 |
| **OR = 1.35** | 1.00 | 0.83 | 0.47 |
| **OR = 1.4** | 1.00 | 0.91 | 0.57 |
| **OR = 1.45** | 1.00 | 0.96 | 0.67 |
| **OR = 1.5** | 1.00 | 0.98 | 0.75 |
| **OR = 1.55** | 1.00 | 1.00 | 0.82 |