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Influences on alcohol and lifestyle behaviours among partners of UK (ex-)military personnel

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FiMT Foreword

Service life presents opportunities and challenges for military families and this study has helped to increase our understanding on how these may impact their health and wellbeing.

It is positive that this research did not find that the alcohol behaviours of military personnel's partners indicated high levels of risky drinking, and the report recognised that where factors did influence alcohol use, many such factors could also be found among non-military families.

Whilst this study focused primarily on the factors that influence alcohol use, the research also indicated some additional unique lifestyle pressures that military families can experience alongside the broader pressures of daily life. These include the impact of the uncertainty over future plans; repeated postings to new geographical areas; distance from wider family and friends; and the impact of frequent separation, sometimes with the added stress of an operational deployment and the potential threat to life that may carry.

These factors can all affect the health and wellbeing of family members and it is important to understand these in order to ensure partners have access to appropriate support. It is also key to recognise the benefits of being part of an Armed Forces family, particularly the network of support and sense of community, which the report highlights.

Military partners make a significant contribution to our Armed Forces community and we must ensure their service is acknowledged and recognised in policy development and service delivery. This report provides part of the growing body of evidence that can underpin these improvements and drive change, so that we can effectively provide the support that adequately reflects the contribution of our military families.

Michelle Alston
Chief Executive, Forces in Mind Trust

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Our advisory panel members included:

Andrew Misell - *Cyfarwyddwr Cymru, Director for Wales, Alcohol Change UK*

Andy Bacon - *Former Senior Programme Lead, Armed Forces Commissioning*

Carl Griffin - *Consultant in Public Health, Defence Public Health Unit, Ministry of Defence*

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Abbreviations

AA	Alcoholics Anonymous
BAI	Brief Alcohol Intervention
ACT	Acceptance And Commitment Therapy
AUDIT-C	Alcohol Use Disorder Identification Test for Consumption
CBT	Cognitive Behavioural Therapy
CoC	Chain of Command
DMS	Defence Medical Services
FAM	Future Accommodation Model
FiMT	Forces in Mind Trust
FLAGS	Forces Alcohol and Gambling Support Service
GSST	Guy's And St Thomas' Hospital
MAO	Modernised Accommodation Offer
MI	Motivational Interviewing
MoD	Ministry Of Defence
NACOA	National Association for Children Of Alcoholics
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NCO	Non-Commissioned Officer
PHQ	Patient Health Questionnaire – *a measure of common mental disorders (depression & anxiety)*
PSP	Public Service Personnel
PTSD	Post-Traumatic Stress Disorder
SEND	Special Educational Needs and Disabilities
SFA	Service Families Accommodation
SFAD	Scottish Families Affected by Drugs And Alcohol
RTA	Reflexive thematic analysis
WHO	World Health Organization

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Executive Summary

Background

Whilst most spouses/partners (hereby referred to as 'partners') of military personnel do not report issues with alcohol misuse (1-3), there is evidence that the female partners of military personnel exhibit distinctive drinking patterns (4). For instance, UK military partners appeared to drink less frequently yet reported more drinks per occasion, and higher levels of binge-drinking, compared to the female partners of civilians. The alcohol use of military partners appears to be linked to longer military-related separations (2, 4), but it is unclear how and why separations influence drinking or what other factors may influence partners' drinking behaviours.

This study aimed to explore influences upon the alcohol use of partners of UK military personnel. To date, there has been limited work on this topic in a UK context, and no qualitative research investigating alcohol use in this population. This work is therefore necessary to determine how best to support military partners who are experiencing problems with their alcohol use. The project consisted of three parts:

1. A systematic review of the published literature to determine levels of alcohol outcomes (misuse, binge-drinking etc) and related risk factors among military partners.
2. A qualitative diary-interview study which sought to understand military partners' experiences of drinking and their perceived influences (Study 1).
3. A review of available supports for partners of (ex-)military personnel who wish to reduce their alcohol use (Study 2).

Overview of prior research *(Systematic review)*

This systematic review served as an update to an earlier review which focused upon the alcohol misuse of military partners. A total of nine papers had been published since 2018, mainly from the US. The levels of alcohol use reported by the papers varied based upon the measure that was used to capture alcohol use and the type of study.

Key findings:

- UK research on the alcohol use of military partners remains limited.
- Of the two UK studies identified, one found greater hazardous alcohol use (defined by number of drinks and frequency of drinks consumed per sitting) in female military partners than the female partners of civilians, and even higher levels in those in relationships with ex-military personnel with mental health problems.
- UK military partners seemed to report higher levels of negative alcohol outcomes (such as binge-drinking and alcohol misuse) than their US counterparts.
- A US study suggested some gender differences with male partners of military personnel being more likely to drink alcohol and meet levels of alcohol misuse, yet female partners were more likely to binge-drink.
- Risk factors for poorer partner alcohol outcomes (e.g. risky drinking and binge-drinking) included younger age, male gender, military-related separation, relationship difficulties, military personnel's own drinking, risks relating to deployments and mental health problems and other substance misuse.
- No qualitative studies were identified.

Influences upon the alcohol use of military partners: a diary-interview study *(Study 1)*

We gathered diary entries from 62 women in relationships with UK male military personnel from different service branches and ranks. These were then used to interview 21 female partners. A total of 8[1] participants of the interview group reported drinking at increased (to high) risks according to their AUDIT-C scores (≥5).

Interview narratives indicated a variety of drinking behaviours with differences in the volumes of alcohol consumed, the frequency of drinking, personal preferences and drinking motives (e.g. drinking to socialise, for enjoyment and to relax and to relieve stress). Overall, findings from this study highlight how aspects of participants' lives both prevented and facilitated drinking in different ways. These were captured by the following three themes:

a. Saving up drinking for social occasions Drinking occasions were sometimes limited because of everyday responsibilities, such as parenting, and this was especially the case if husbands were posted or deployed away from the family home. Partners also described reduced opportunities to drink because they felt disconnected or excluded from military communities and experienced fragmented social networks as a result of frequent relocations. Drinking was therefore saved up for when social opportunities were possible, including military formal social events, drinking virtually, and at meet-ups and reunions with friends and family.

b. Managing how I feel

Participants reported drinking to both bring about positive feelings and to relieve negative feelings, like stress, loneliness, boredom and sadness. This is a common coping strategy found in other populations but appeared to be exacerbated by the pressures resulting from military-related separation. There was also evidence that participants avoided or adjusted their alcohol use in accordance with a range of physical and mental health symptoms. This is consistent with other work that highlights how individuals assess the risks and advantages of drinking based on how they subjectively experience alcohol's effects.

c. Drinking, family life, and military rhythms

Participants identified a range of influences upon their drinking linked to military life. These were due to the drinking behaviours or presence of their husband or general military rhythms and environments. Military influences both reduced and encouraged alcohol use in different ways:

- **'Full Mum duty'** encouraged both abstinence and stress-based drinking: Participants reported avoiding alcohol during military-related separation when they were single-handedly managing domestic and parenting duties with limited supports (on top of their own employment and other concerns). Yet, this time was also prone to impulsive and unplanned stress-related drinking to reduce feelings of stress, loneliness and boredom.
- **Drink-weekending:** Drinking at the weekend is a common pattern in many populations but this pattern was more pronounced for participants whose military partners were away during the week. Drinking thus occurred in the social context of husbands returning home when participants had adult company, could relax after managing family life alone and could bond with their husbands. Military personnel sometimes drink more heavily once returning from dry deployments (termed a 'deployment liberty' effect'). We found partners may also experience this 'liberty' effect themselves when they are no longer 'on duty' at home alone.

[1] *AUDIT-C scores included to provide context for the participants interviewed and cannot be taken as statistically representative of the drinking of military partners*

- **Syncing and seesawing:** We found evidence that the drinking behaviours within couples are influenced by one another. Some partners drank more when military partners were home (particularly if personnel were habituated to heavier drinking in their military circles), whilst others avoided drinking if concerned about their partners' drinking and/or monitoring family members' health and wellbeing.

Overall, participants' drinking, and other lifestyle behaviours, were responsive to everyday responsibilities and military rhythms. The on/off nature of military-related separation seemed to be reflected in participants' drinking. This may shed light on the previous findings that military partners drink less frequently, but consume more alcohol per drinking occasion and engage in more binge-drinking (4, 5).

Review of services for military partners *(Study 2)*

The second study of this project sought to identify alcohol programmes available to support the partners of military and ex-military personnel. A scoping review identified 50 potential programmes that partners could access to address their alcohol use. A total of 32 programmes were aimed at supporting the alcohol use of members of the general population; 4 supported members of the general population with other family members' alcohol use; 12 were for (ex-) military personnel specifically, and 3 supported family members with the alcohol use of (ex-) military personnel but not their own.

Key findings from Study 2 were:

- Programmes were delivered from a range of UK-wide providers and included app-based supports, helplines, psychoeducational resources, peer support groups, programmes that incorporate Brief Alcohol Interventions (BAIs), and therapeutic services.
- Whilst some (ex-)military-specific programmes were available, these did not support partners with their own alcohol use, but rather focused upon the alcohol use of (ex-)military personnel.
- Although the family members of (ex-)military personnel can access a range of general population programmes, no alcohol supports catered specifically to this group, meaning there were a lack of programmes that may be cognisant of the specific drivers and contexts of this population.
- Eligibility criteria and the content of programmes were often unclear. It was further uncertain how recovery models were tailored to (ex-)military populations and whether programmes were evaluated, with the exception of DrinksRation (34).
- Research suggests psychoeducation and self-help resources are effective in reducing alcohol use. As these supports be easily accessed, these may be particularly useful resources for partners drinking at lower levels to integrate into their busy lives (as reflected within Study 1's findings), allowing them to make changes to drinking behaviours as independently as possible.

Recommendations

Recommendations have been developed in partnership with stakeholders from the Armed Forces community, including service providers, military family charities, and policy makers. They provide important evidence for the UK Armed Forces Families Strategy 2022-32[2] and may help to inform actions to deliver this strategy. Recommendations are directed toward a range of stakeholders – these should not be seen as siloes of work but rather areas that should be addressed in partnership with those working across research, policy, and practice to improve the lifestyle outcomes for military partners and families.

Public health messaging and service provision

1. Public health messaging should draw on incentives other than health to motivate alcohol reductions among military partners. Messaging could also focus on more relatable and clear information on what level of drinking may constitute risks.

The present research found that some people may be unknowingly drinking at some level of risk. Campaigns may be useful for raising awareness around types of risky drinking that look different to the stereotypical images of heavy binge-drinking in night clubs or extreme addiction. Public health messaging could also draw upon other lifestyle factors which appeared to motivate participants in the current research to reduce their alcohol intake; such as saving money, improving sleep, avoiding the consumption of empty calories and improving energy levels.

[2] *Ministry of Defence. UK Armed Forces Families Strategy 2022-32. 2022.*

2. Alcohol supports aimed at (ex-)military individuals should consider expanding their eligibility to include family members.

Our scoping review found most alcohol supports for the families of (ex-)military personnel revolved around supporting them with (ex-)military personnel's alcohol use or were unclear about eligibility for partners. Partners may benefit from being able to access such supports for their own alcohol behavioural needs, particularly if those supports are cognisant of the types of military pressures and experiences affecting military families. This could be achieved by widening the eligibility of existing support services to include partners, and educating services on the distinctive features of military life that can affect family members.

3. Digital and remote supports (such as online programmes and mobile apps) may provide a reasonable long-term strategy for supporting partners with their drinking and other lifestyle behaviours.

Military partners drinking at lower, yet still risky levels may benefit from discreet, flexible interventions that can be delivered remotely and anonymously and can be accessed in a way that fits with their own time capacities. Remote and digital support may also enable a continuity of support across periods of transition, such as relocation, or when leaving the Armed Forces community.

4. Programmes allowing individuals to track their drinking behaviours may improve awareness of less healthy habits and could be designed to include other lifestyle behaviours.

Participants found diaries and interviews to be useful reflective opportunities, which suggests a readiness for diarising/logging behaviours. Apps such as DrinksRation may help individuals to track fluctuations in their drinking to build a more accurate picture of their drinking over time. The incorporation of reminders and notifications may benefit groups who are particularly busy and who may benefit from the motivational messaging. Based on our findings that participants were not incentivised to look for alcohol supports so much as support with other elements of their lifestyles (e.g. eating behaviours and exercising), we suggest the development of programmes that can incorporate a range of lifestyle behaviours in addition to alcohol use.

5. Programmes that address behaviours within the family system could help identify moments that family members may be more prone to stress and require more support.

Programmes that address families' lifestyle behaviours could have wide-reaching benefits. This approach would allow for the identification of key points at which families encounter transition events that increase periods of stress or vulnerability (e.g. military-related separation and reunions). Such an approach would also take into account the mutual influence family members' lifestyles behaviours have upon one another (e.g. syncing up or offsetting each other's drinking and eating behaviours as seen in Study 1).

6. Alcohol supports should be evaluated to determine their effectiveness and acceptability.

From Study 2, it was unclear as to the extent to which the identified alcohol supports had been evaluated and how adaptations to general behavioural models of change and recovery had been modified to suit (ex-)military populations. More could be done to ensure programmes are appropriately evaluated and to understand the efficacy and acceptability of interventions being delivered in this space.

Funders and researchers

7. Research is needed that explores lifestyle behaviours amongst a broader range of partners.
While attempts were made to recruit a diverse sample, participants were largely white women married to male military personnel. Future studies should consider ways of engaging people of other genders, other ethnicities and the LGBTQ+ community, in order to explore the specific experiences and influences upon their alcohol use and other lifestyle behaviours.

8. Research is required to investigate the eating behaviours of military partners.
Eating behaviours, such as restrictive and binge-eating, emerged as a prominent issue among many partners we interviewed. These behaviours were often more of a concern to participants than their alcohol use. Findings indicated that the stress, loneliness and boredom of military-related separation led at times to under- and over-eating. Further exploration into understanding this population's eating behaviours would be beneficial in order to develop programmes or campaigns that may support partners in managing their eating in response to the variety of stressors and uncertainties associated with military life.

9. Further research should focus on the relationship between stress and alcohol use in military partners and the experiences of those with higher levels of drinking.
Within the present research, we did not capture the experiences of partners with the highest levels of risky drinking; however, findings did include escalations in drinking in response to various military-related stressors and challenges. Further work is needed to determine how best to aid and support partners to cope with such matters, and to identify the specific influences and facilitators of behavioural change amongst those military partners who may have more severe use.

Statutory services

10. The MoD's UK Armed Forces Families Strategy should incorporate an equivalent to the 'Lifestyle' health priority which is outlined in The Defence People Health and Wellbeing Strategy 2022-27.
The Defence People Health and Wellbeing Strategy 2022-27 (7) recognises 'Lifestyles' as a health priority (including smoking, alcohol use, gambling and eating). Lifestyle behaviours are not explicitly mentioned in the current Families Strategy but their inclusion would help to specify how the MoD will meet its commitments to support and improve the wellbeing and quality of life of family members.

More broadly, the current project identified numerous logistical challenges that military partners reported as influencing their alcohol use and its drivers (e.g. stress and mental health issues). Most significantly, participants described the challenges of parenting responsibilities whilst military personnel were posted away or deployed. Reviewing the current provisions and supports that military partners can access, including the possibility for increasing levels of childcare during these key periods, could be beneficial. This is relevant to both the wider Defence People Health and Wellbeing Strategy and the Families Strategy given that serving personnel and their partners play an influential role in one another's lifestyles and health and wellbeing outcomes.

11. Developing educational programmes for healthcare professionals to raise awareness of the issues affecting military families.

The 'veteran-friendly accreditation scheme'[3] equips GP surgeries with specialist knowledge to better support ex-military personnel. A similar UK-wide scheme to train primary health care workers about the additional needs of military families who access civilian healthcare would be valuable, given the findings of this project. GP surgeries are on the 'front line' in providing advice and witnessing the impacts of lifestyle choices and behaviours. Partners may also attend GP practices for their children routinely, therefore GPs may be able to signpost and tailor current interventions to partners' military-specific needs.

[3] *Royal College of General Practitioners (GP) eLearning. Veterans' Health Hub 2024. Available from: https://elearning.rcgp.org.uk/course/view.php?id=803.*

Report

Introduction

Background

An increasing body of literature is concerned with the health and wellbeing of the spouses and partners of (ex-)military personnel (hereby referred to as 'partners') in the recognition that the families of military personnel can be impacted by the demands, structures and operations of their loved one's career (8-12). Alcohol misuse has been one area of focus since, typically, the Armed Forces community have demonstrated higher rates of alcohol use than the general population (10% among military personnel (13) and 11% among ex-military personnel compared to 6% among the general population (14)).

A prior review of alcohol use among military partners demonstrated that alcohol misuse and other harmful drinking behaviours did not appear to be common in this population (1). However, much of this research was based in the US. More recent UK research, while limited, suggests military partners may exhibit different patterns of alcohol use and specific stressors linked to their alcohol use compared to the female partners of civilians (4). While most UK female military partners did not endorse alcohol misuse (84.6%), they were more likely than the partners of civilians to consume alcohol at hazardous levels (78.4% versus 59.6%), to report binge-drinking monthly (65.0% versus 45.1%), and to drink more than 3 drinks per occasion (54.4% versus 36.7%). However, military partners were noted to drink less frequently than partners of civilians (31.4% military partners drank 2-3 times a week compared to 42.2% of partners of civilians). These specific differences suggest that military partners show different patterns of alcohol use and may experience different kinds of influences upon their drinking.

Understanding alcohol use and its drivers in this population is important since binge- and episodes of heavy-drinking can lead to a range of physical and mental health problems, especially in women, with specific risks like liver damage, heart disease and cancers, compared to men (15). UK research has found increases in binge-drinking for UK partners with experiences of longer family separations (4), which may occur when personnel are away from the family home due to training, postings or deployments. This association was similarly found in a US study where the partners of personnel deployed longer than 11 months demonstrated greater alcohol misuse (2). The influence of military-related separation upon drinking could be attributed to the stresses associated with personnel being on a deployment, however research conducted to date found deployment itself was not associated with alcohol misuse (2, 16, 17). It has not been determined how separation may therefore influence alcohol use.

To date, the majority of research that explores alcohol use focuses upon the perceptions, barriers and facilitators of help-seeking among (ex-) military personnel (18-20), with the specific needs of military family members less well-known (21). To help address this research gap, the present study sought to explore the drinking behaviours and experiences of the partners of military personnel and to describe military, social, cultural, family and health-related influences upon their alcohol use. Secondly, this study scoped the range of supports available to this population for support with alcohol use.

Considering the potential influences on partner alcohol use

To understand the health outcomes of any group, it is important to understand the contexts in which people live. The set-ups and experiences of military families vary greatly, with diversity of family membership, the roles and responsibilities of the military family member, their living conditions, regional differences, as well as families' own everyday lives (22). In this way, there is no single 'lifestyle' for military families, yet there may be shared and common experiences that can have similar effects upon their health and wellbeing.

Cramm et al. (23) suggest a helpful framework (Figure 1) for understanding the specific and intersecting aspects that can characterise the lifestyles of Public Safety Personnel's (PSP) families. PSP may include emergency responders, correctional workers and military personnel. Cramm et al.'s framework outlines three key dimensions that shape a PSP families' lifestyle; 1) logistics; 2) risks; and 3) identities. While these dimensions can apply to many different types of families who work in a range of high-risk job roles, challenges relating to these dimensions can be concentrated in occupational groups like the military. These can introduce specific and accumulating challenges that families are required to balance.

1. Logistics. Nonstandard forms of work, such as shift-work, give rise to unpredictable work schedules that can affect family activities, relationships, communication and the degree that family members feels 'in sync' with the broader community (23). In military life, occupational demands placed upon military personnel are delivered from a strict, hierarchical Chain of Command (CoC) that may compete with family needs. A military family may experience frequent transitions where personnel work away during the week and reintegrate back into the family home at weekends (24-26). Termed 'weekending', this mode of working is common in Naval settings, with families living onshore whilst partners may be posted intermittently offshore or to geographically remote areas of the UK (27). At other times, personnel may deploy on combat and humanitarian missions. Such separations often require partners to manage responsibilities that would otherwise be shared, particularly around parenting (8, 27-30). US research has shown that separations can impact partners' time to socialise and engage in physical activity (31). Other logistical challenges for military families include the requirement to move to different parts of the country or abroad, adapting to new places and varying accommodation options (e.g. living on military bases, on military streets or civilian housing) (29).

2. Risks. Military work can be accompanied by a range of hazards and risks, from the strain of working in pressurised environments to deploying on operations that involve violence, injury and morally injurious experiences (32-34). Such risks can extend to the family home, with family members expressing concern for the safety and welfare of their loved ones and, for some, managing personnel's health when they return home with physical injuries, stress reactions, or mental health problems (35-37). Family members may take on caregiving roles in these circumstances, which can further affect their wellbeing and family relationships (38, 39).

3. Identities. Lifestyles can both shape and be shaped by identities in various ways. For example, some occupational cultures (such as the fire, police and military) generate strong social identities.

Families can also be socialised into these unique groups, which are distinctive to the rest of society, and can positively and negatively affect how one views oneself and one's place in the world. Identities may vary depending on the cultures of units, branches, military bases, streets and towns and rank. Prior work has considered how military partner identity is sometimes subsumed into the identity of personnel by being thought of as only a 'military wife' (40).

This framework is useful for understanding how the experiences and challenges of military life can be compounded in military families and the influence this can have on health and wellbeing. Importantly, Cramm et al. note that PSP families' experiences and dimensions are not all negative, and people do report positive experiences of community, excitement, reward and exploration. The impacts of one's occupation on family members thus relies upon the types of logistics, risks and identities that come with the type of occupation of the PSP, and how these dimensions are balanced by individual members, by the family as a unit, and mitigated by support received by institutions and other services and friends and family.

Figure 1. Lifestyle dimensions of Public Safety Personnel families based on Cramm et al (23)

Overview of the current study

The overall aim of the current project was to better understand the alcohol use of military partners and its main influences and to identify current alcohol supports that could address alcohol outcomes in this population. An overview of the study can be seen in Figure 2.

Study design

The first part of this project was to conduct a systematic review of the published literature to determine the current evidence base exploring alcohol outcomes (e.g. alcohol misuse and binge-drinking) and related risk factors in military partner samples. Two separate studies were then conducted with the following objectives:

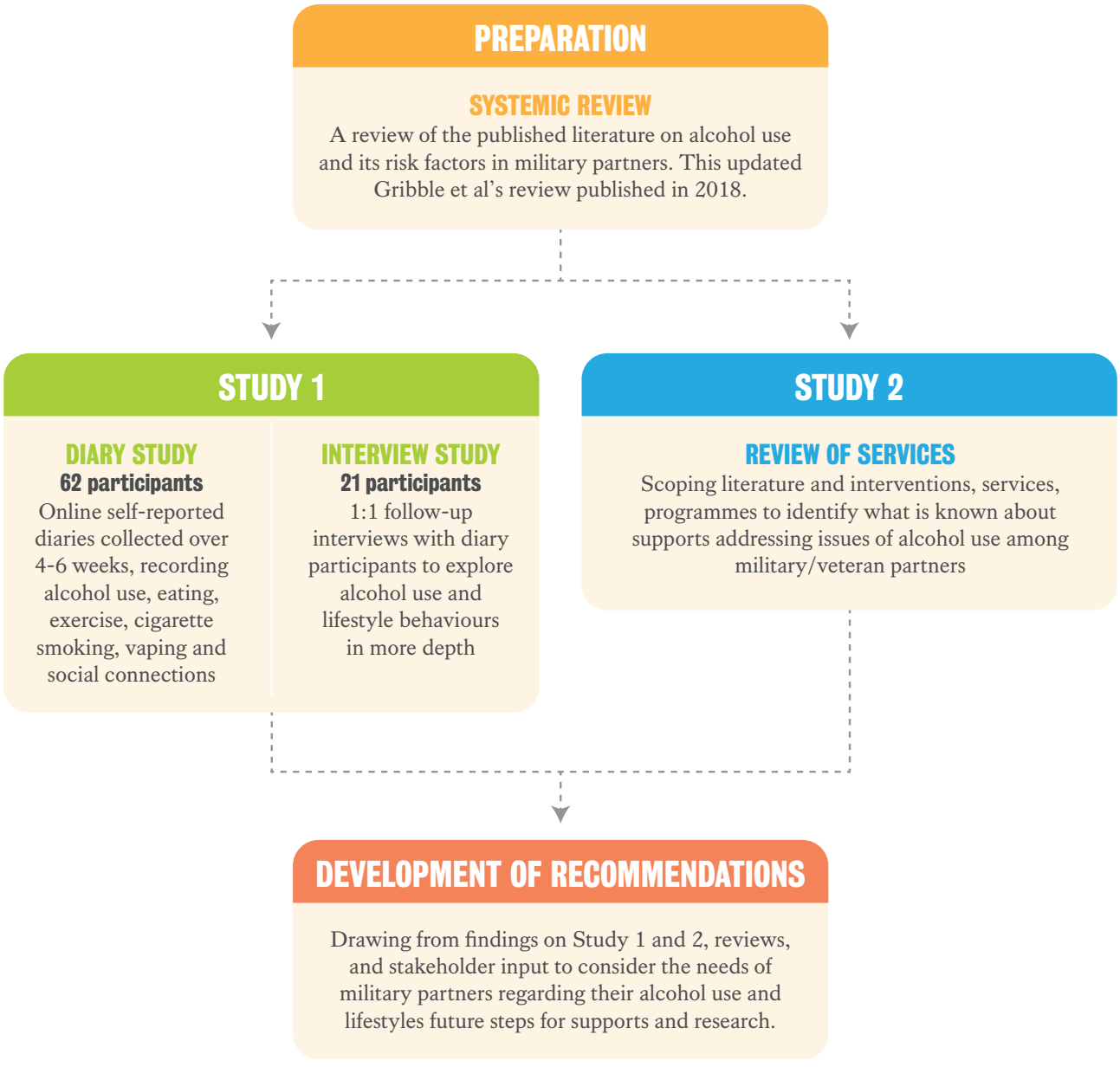
Study 1:

- To understand the experiences of military partners regarding their drinking behaviours.
- To explore the social, cultural, and health-related influences upon the drinking behaviours of military partners.

Study 2:

- To identify current services, programmes, digital products, and supports that could be adapted to encourage reductions in alcohol consumption and improve drinking behaviours among military partners.

Figure 2. An overview of LIFE-Q's study design



Alcohol outcomes among military partners: a review of the literature

This section focuses upon exploring the published literature on alcohol outcomes (misuse, binge-drinking etc) in this population to understand what is already known. This review provides an update to a systematic review conducted in 2018 investigating the levels and risk factors of hazardous alcohol use among the partners of military personnel (1).

Box 1. Findings from a systematic review of alcohol outcomes among spouses and partners of (ex-) military personnel

The updated review used the same search strategies as Gribble et al. (2018) to find any literature that has been published since. We explored a range of alcohol outcomes such as alcohol misuse (which the World Health Organisation (WHO) defines as drinking at levels that increase risk of, or cause, detrimental health and social consequences for individuals and those around them (71)), risky drinking, and binge-drinking.

In the six years since the original review, there have been nine additional quantitative articles focusing on military partners' alcohol use; no qualitative studies focusing specifically on alcohol use among military partners were found. Most research is still based on US studies and therefore current research is unlikely to reflect the realities of UK military partners.

How common is alcohol misuse among military partners?

- Levels of poor alcohol outcomes varied as studies used different alcohol measures and had different study designs.
- US studies reported rates of 6-10% alcohol misuse (7, 9, 72) when using the Patient Health Questionnaire (PHQ) and 10-15% (8, 10, 12) when using the Alcohol Use Disorder Identification Tool (AUDIT-10).
- Only two UK studies examined alcohol misuse among female military partners. One found 15.4% endorsed probable alcohol misuse (4). Another based on the partners of ex-military personnel receiving support from a military mental health charity showed rates of 45% using the shorter version of the AUDIT-10, the Alcohol Use Disorders Identification Test for Consumption (AUDIT-C) (11). Higher levels in the latter study may relate to the fact that these families are navigating additional difficulties (whether this be ex-military personnel's and/or their partners') which may affect partner drinking which may impact their own drinking and wellbeing Indeed, mental health and alcohol use are commonly comorbid issues (41).
- Although direct comparisons are not made in the research, these findings suggest alcohol misuse may be higher among UK military partners compared to those in the US.
- When looking at other types of alcohol use, 65% of UK military partners reported binge-drinking at least monthly compared to 45% among the partners of civilians; UK military partners also reported a significantly higher number of drinks per drinking session (54% in military partners and 37% in the partners of civilians) (4). Binge-drinking was additionally higher among female US partners compared to male partners (19.4% vs 16%) (7).

Factors linked to alcohol use among military partners

Factors that may increase or decrease alcohol use among military partners can be grouped into five areas: 1) Demographic factors; 2) Family and relationship factors; 3) Deployment factors, 4) Military-related separation, and 5) Health factors.

Demographic and military factors:

- Risky drinking was greater among younger partners (6).
- Male partners exhibited poorer alcohol outcomes in general 42, 43) but female partners exhibited greater levels of binge-drinking (7).
- The influence of personnel service branch and rank upon partner alcohol outcomes were not studied.

Family and relationship factors:

- Military personnel's alcohol misuse and heavy drinking were associated with their partner's drinking behaviour (12).
- Partners who were separated from personnel (in terms of marital status) were more likely to engage in risky drinking compared to partners who were married (6).
- Family satisfaction appeared to protect against risky drinking for female partners only (6).

Deployment factors:

- There were mixed findings relating to deployment. For example, deployment was not associated with alcohol outcomes for military partners according to a UK study (4) and, although it was not associated with alcohol misuse in a US study, it was linked with heavy drinking (12).
- In other US studies, combat versus non-combat deployments were related to alcohol outcomes, including greater binge- and heavy drinking among partners (5). Risky alcohol use was greater among partners if they were stressed about a combat deployment or a duty assignment[4] and if they were bothered by what personnel had shared about their deployment experiences (8).

Military-related separation:

- UK female partners who were separated from the military personnel for more than two months in the last two years reported more binge-drinking episodes compared to those who had no or shorter than 2 months' experience of separation (4).

Health factors:

- Alcohol outcomes were linked to a range of psychological problems, including psychological distress, depression, anger, panic/anxiety, post-traumatic stress symptoms (PTSS) and PTSD (6-8, 10).
- Tobacco use and the use of illicit drugs or prescription drugs by partners were linked with partner alcohol problems and risky drinking (6, 7, 10).
- No studies explored the relationship between physical health problems and alcohol use.

Summary of the literature

- Overall, UK research on the alcohol use of military partners is limited.
- Of the published literature, our review found that UK military partners appear to have higher levels of negative alcohol outcomes than their US counterparts. For example,

[4]The definition of a duty assignment was not specified by this paper but may refer to a deployment that did not involve combat.

female partners of UK military personnel drink less frequently than female partners of civilians, but they drink more per drinking occasion.

- Female partners of military personnel may be more likely to binge-drink than the male partners of US military personnel and female non-military UK partners.
- Relationship factors such as military personnel's drinking and relationship difficulties may influence partner drinking.
- Findings linking alcohol use and deployment are mixed but partner drinking appears to be more clearly influenced by risks relating to deployments.
- Partner alcohol use is consistently linked to poorer mental health and substance use but there is a lack of research on links to physical health.
- There remains a lack of qualitative research that can provide insight into how drinking behaviours occur in real-life settings.

Study 1: Understanding the experiences of military partner alcohol use

Study 1: Understanding the experiences of military partner alcohol use

The value of qualitative research has long been recognised in the field of alcohol research (44, 45) as quantitative survey data alone may not give insight into the habits, social meanings and cultural significance of alcohol use in individuals and groups. A qualitative approach was chosen for the current project in order to shed light on how the alcohol use of military partners can be influenced by experiences of military-related separation, deployment, family dynamics, military cultures and environments. Qualitative methods further allowed us to explore the perceptions and attitudes that may underpin alcohol use, as well as the potential support needs of military partners. Improving our understanding in this way enables the development of more meaningful policy and alcohol messaging. Study 1 therefore used a qualitative approach to explore two objectives:

Objective 1: To understand the experiences of military partners regarding their alcohol use.

Objective 2: To explore the social, cultural, and health-related influences of military partner alcohol use.

Methods

Study 1 used a diary-interview method to better understand the drinking behaviours of military partners (46). Whilst we sought to understand participants' alcohol use in terms of frequency of drinking and quantity of volumes consumed in order to determine potential risk, we were also interested in 'drinking behaviours', referring to the ways that people drink and the contexts in which alcohol use happens.

Combining diary and interview approaches enables researchers to capture both textual and narrative responses and gather different details about the meanings and settings underpinning

people's alcohol use (44, 45). It also gives participants the freedom to share what is important to them rather than being led by the researchers' interests. Diaries may also enhance a sense of privacy that could allow participants to feel more comfortable sharing and disclosing their information (47). Weekly diaries fed into the interview study by:

- Providing 'on-the-ground', 'real-time' insights and access to details and reflections on daily life that are otherwise difficult to collect (48).
- Collecting information to tailor the interview schedules to individuals. This allowed us to inquire about specific details about the weeks they took part and to better understand how their use of alcohol changed in relation to different life events.
- Supporting participants' recall when describing their lifestyle behaviours in the interview.
- Enhancing the feeling of a rapport between interviewer and participants where the interviewer could demonstrate an awareness and knowledge of the participants' lives based on their earlier diary entries.
- Offering longitudinal insight into participants' lives across multiple diary entries and the interview.

Recruitment and sampling

A research advertisement was circulated by a range of military contacts and networks, including the Naval, Army, and Royal Air Force Families Federations, the Royal British Legion (RBL), Cobseo (The Confederation of Service Charities), Ripple Pond, Royal Navy and Royal Marines Charity, and the Military Wives Choir Organisation. The advertisement was also shared on social media and sent to active research cohorts of partners who consented to hear about future research.

Partners were able to participate in the diaries if they were:

- Based in the UK
- Not pregnant or breastfeeding
- Not employed by the military or ex-military themselves
- Partners of regular personnel

We aimed to recruit a diverse sample of partners, including the partners of both military and ex-military personnel and male partners and LGBTQ+ partners in order to include a diversity of voices and stories. The recruitment of partners of ex-military personnel was intended to understand how drinking behaviours and their influences may be influenced by the military-to-civilian transition and a post-military setting. Calls for participants were tailored at different stages to appeal to a range of partners. While some male and LGBTQ+ partners provided diary entries, they did not proceed to interview and we were not able to present their diary data due to low participant numbers. Only one partner of someone who was ex-military was recruited; therefore findings largely reflect the partners of current military personnel.

Procedure

Diary component

Online diary entries were collected between May 2023 and March 2024 and were hosted on the website, Qualtrics. Participants began their first diary entry by following the link included in the research advertisement. Here, they could read the Participant Information Sheet, fill in a Consent form, and complete eligibility questions. Participants completed 61 diary entries across four to six weeks to provide more detailed information and reflection on alcohol use and key influences.

The diary asked questions about participants' general experiences during the week and various lifestyle behaviours using both free-text boxes and structured multiple-choice questions. At each week, participants supplied information on the following:

- **Life contexts** relevant to their week and more broadly (e.g. events, illnesses, job changes, moves).
- **Health conditions** affecting their and their family's health, whether physical or mental health-related.
- **Alcohol use** – how much participants drank during each day of the week (alcoholic units), on which days, and who they drank with.
- **Eating behaviours** - how participants ate that week and how they ate in general (e.g. preparing home cooked meals, grabbing foods on the go, eating convenience foods, going out to dinner, eating takeaways).
- **Exercise** - how many minutes of physical activity they completed and who with.
- **Smoking/vaping** – frequency of smoking, number of cigarettes and/or the strength and volume of vaping liquid.
- **Social activities** - the types of social activities they took part in and who with.

Within each domain, participants answered questions on whether their week's activity was usual and how they felt about their alcohol use, eating, exercise, smoking/vaping and socialising that week. We also asked about any other activities participants wanted to note, with a prompt explaining they could report on subjects like meditation, reading and gambling.

During the first week of their diary entries, participants answered selected questions from the AUDIT-C and AUDIT-10 to estimate their drinking over the past year (49). Using their AUDIT-C responses, participants were given a marker of risk based on their scores and were categorised as follows: low risk (0-4), increased risk (5-7), higher risk (8-10) and possible dependence (11-12). The scores were not used to estimate a level of alcohol misuse that would be representative of all military partners; rather, they were used to provide insights into the drinking patterns and influences of individual participants. A cut-off of ≥5 was used to indicate whether participants were drinking at levels associated with risk (50). During Week 1, participants were also asked about how often they drank with their spouse/partner and whether participants had concerns about their spouse/partner's drinking in the last year/ever and vice versa.

A total of 62 participants took part in the diary study; this sample size maximised the chance to recruit from the diary study participant pool, a range of different participants for the interview study.

Interview component

Participants in the diary component could indicate if they wanted to take part in the interview stage via an optional question in their diary entries. In the first phase of recruitment, we observed a strong response from participants who had low levels of drinking and who were in relationships with more senior ranking military personnel. To rebalance this, we introduced additional exclusion criteria to capture the experiences of partners of personnel in non-commissioned ranks and who drank at least twice a month.

Interviews were conducted between June 2023 and March 2024. A semi-structured interview format was followed, with sections allowing participants to elaborate upon their living situations, their partner's military career, their own employment, their family set-up and details on their lifestyles including exercise, eating, smoking, vaping and social connections. With regards to alcohol use, participants were asked to describe their drinking, the various contexts in which drinking happened, and to reflect on influences, changes and notions of reduction.

The interview schedule was personalised using diary entries; for example, if participants described having injured their ankle, this was mentioned in the exercise section; if they had mentioned that their partner was on deployment, this was raised throughout the interview schedule. Participants were also given scope to reflect on historical moments in their lives (such as when they or their children were younger) or on how their lifestyles may differ when their military partner was or was not away from home. Lastly, if participants mentioned specific events involving alcohol, such as reunions or holidays, these were brought into the interview as springboards for further discussion to explore how this impacted their alcohol use.

Ethical approval

The study was given ethical approval by the Ministry of Defence Research Ethics Committee (reference: 2218/MODREC/23).

Incentives

Incentives were used to encourage participation and thank participants for their time. After filling in their diary entry for Week 1, participants were emailed links for three entries (Week 2, 3 and 4) over the course of a four-to-six-week period. Participants within the diary study were entered into a spot prize (four x £50 e-vouchers) if they completed at least one diary entry, with additional entries added into the prize draw for each week they submitted an entry. All interview participants were given a £20 e-voucher to thank them for their time.

Analysis

Interview data were analysed using a reflexive thematic analysis (rTA) approach, as defined by Braun & Clark (51, 52). The techniques of rTA allowed for commonalities, patterns and contradictions to be examined across the different individuals and across time. This was augmented with insights and/or quotes from diary participants where they added additional depth. The analysis followed these steps:

1. Familiarisation with the data

The researcher familiarised themselves with audios, transcripts, diary entries, memos logged during data collection and analyses, and the matrix described.

2. Generating initial codes

Data were managed by assigning codes to represent their meaning and content.

3. Searching for themes

Codes were grouped into possible themes based on similarities and good fit.

4. Reviewing themes

Themes were consistently reviewed to determine if they represented different elements, leading to some themes being relabelled, merged or discounted.

5. Defining and naming themes

Participant quotes were anonymised and pseudonyms used for all partners. Labels of some key characteristics were given alongside quotes to provide context on participants; these included past or present experience of being 'married unaccompanied' (MU, described below); their AUDIT-C categories of low (score 0-4), increased (score 5-7) or high-risk score (8 or above), and whether they had children. Participants are therefore referred to in this report in line with the following example: Eve (no MU[5], AUDIT-C increased risk, has children).

Given the focus of the present study on alcohol use, findings concentrate on those participants who gave the most information regarding their alcohol use, influences, and contexts. Some participants are therefore represented more

[5]Those who did not report experiences of being 'married unaccompanied' are referred to as 'No MU' (i.e. 'no Married Unaccompanied' experience). This is based on the data shared during the diary or interview and therefore may not be true in practice for some participants.

Table 1. Interview participants' characteristics

Pseudonym	Age group	Participants' partners' branch of service	Participants' rank	Living status	Living situation with husband	Have children	AUDIT-C scores
Leanne	31-40	Royal Navy	Officer	Own home	Historical deploy/MU	Yes	Low
Poppy	41-50	Army	Officer	Military housing	Partner home full-time*	Yes	Low
Molly	25-30	Army	Officer	Military housing	Current deploy/MU	No	Low
Danielle	41-50	Army	Officer	Military housing	Historical deploy/MU	Yes	Low
Joanna	31-40	Army	NCO	Military housing	Current deploy/MU	Yes	Low
Natalie	31-40	Army own home	Missing	Private rental	Historical deploy/MU	Yes	Low
Vanessa	31-40	Army	Officer	Own home	Historical deploy/MU	Yes	Low
Abigail	31-40	Royal Marine	NCO	Own home	Historical deploy/MU	Yes	Low
Lauren	31-40	Army	Officer	Own home	Current deploy/MU	Yes	Low
Carrie	31-40	Army	NCO	Military base	Historical MU/deploy	Yes	Low
Harriette	31-40	RAF	Enlisted	Military housing	Current deploy/MU	Yes	Low
Olivia	25-30	RAF	NCO	Military housing	Historical MU/deploy and future deploy	No	Low
Debbie	41-50	Army	Officer	Own home	Current deploy/MU	No	Increased
Izzy	25-30	Army	NCO	Military housing	Historical MU/deploy and future deploy	Yes	Increased
Alison	31-40	Royal Navy	NCO	Own home	Historical deploy/MU	Yes	Increased
Lucy	25-30	Army	NCO	Military housing	Historical MU/deploy and future deploy	Yes	Increased
Claire	31-40	Royal Navy	Enlisted	Military housing	Historical deploy/MU	Yes	Increased
Kayley	25-30	Army	NCO	Military housing	Current deploy/MU	No	Increased
Eve	31-40	Royal Air Force	NCO	Own home	Partner home full-time	Yes	Increased
Caroline	31-40	Royal Marine	NCO	Own home	Partner home full-time	Yes	Higher
Zoe	18-24	Army	NCO	Military base	Current deploy/MU	No	Higher

than those who did not discuss alcohol in great detail. Despite this, findings represent a range of experiences and narratives of alcohol use among military partners.

Findings

Who did we interview?

We conducted 21 interviews with women in relationships with male military personnel; one participant was in a relationship with someone who had left the military (see Table 1).

- All reported being white.
- Most participants had partners in the Army who were of junior Non-Commissioned Officer (NCO) rank or higher.
- Most participants had children - six reported having a child/children who were being assessed for or diagnosed with Special Educational Needs and Disabilities (SEND).
- Most participants were in full or part-time work; those who were not were raising young children.
- The majority lived in military housing outside of a military base or in a private home that they owned - many had previous experience of living on military bases and on overseas postings.
- Many participants were experiencing a range of health issues, including mental health problems as well as physical issues that required daily management.
- Almost all participants described periods of being separated from their husbands as a result of deployment or living 'married unaccompanied'. This term referred to family set-ups where husbands were posted elsewhere during the working week, such as 'weekending', and when husbands were away for longer periods (e.g. combat deployments or rescue/humanitarian operations).

Being 'married unaccompanied' was found across all of the military branches. Living separately appeared to be a conscious choice by families to prevent the upheaval of serial relocations. This helped to create the stability needed for partners to hold down a job, to support their children's wellbeing, to keep their children at certain schools, and/or to stay in certain areas for the continuity of healthcare for themselves or their children (including SEND services).

What we found

This section firstly summarises how participants described their drinking. This is followed by an in-depth analysis of the drinking contexts and influences on alcohol use drawn from diary entries and interviews. Descriptions of risk are used to provide context for those interviewed and should not be interpreted as reflecting experiences of the wider military partner population.

How participants described their drinking

In total, 13 of the 21 participants drank at low levels of risk according to their AUDIT-C scores obtained from their first diary entry, whilst 8 participants demonstrated some level of risk[6]:

- 6 had scores indicating increased risks.
- 2 had scores indicating higher risks.
- No participants had scores that would indicate probable dependence.

The drinking patterns described varied across the participant group. Some participants reported only drinking on special occasions, others described drinking small amounts on a more regular basis (e.g. a couple of glasses of wine over a week period) or drinking weekly at amounts that approached the WHO's definition of binge-drinking for women (>6 standard drinks). A minority of participants were engaging in heavier drinking, such as a bottle of wine every Friday evening or more than 20 units of alcohol over a weekend.

[6] *AUDIT-C low risk (0.4); increased risk (5-7); higher risk (8-10); possible dependence (11+).*

A common phrase across levels of risk and different ways of drinking was: "I'm not a big drinker". Not being a 'big' drinker was defined differently. For some, this meant not drinking very frequently, whereas for others it related to drinking low amounts, not desiring alcohol in a significant way, not wanting to be drunk, not drinking alone or not drinking midweek:

"If I do drink I maybe have one or two and don't really drink – I drink because I enjoy it rather than to go out and get drunk essentially." (Molly, MU, AUDIT-C low risk, no children).

"It's about normal, I have a bottle of wine on a Friday and that's it." (Caroline, no MU, AUDIT increased risk, has children, excerpt taken from her diary entry).

Participants drinking at both low and increased levels of risk highlighted that their drinking was ad-hoc (involving the 'odd' drink), and heavier drinking was deemed as irregular and infrequent:

"I'll have the odd drink if it's in the house when I'm doing my dinner." (Claire, MU, AUDIT-C increased risk, has children).

"So I probably had about three glasses of wine and about two glasses of Prosecco but that's quite unusual. It's one of those things it's more of a... it sounds awful, it's not like when you were a student and you'd go out and get absolutely hammered just because." (Debbie, MU, AUDIT-C increased risk, has children).

Not being a 'big drinker' was sometimes defined in comparison to others' drinking and participants' own drinking in the past. In most cases, participants perceived themselves as drinking less than people in military circles, including both military personnel and their family members:

"I used to really enjoy drinking when I was younger and then, since having kids, I don't drink a lot anyway. I've never really thought to myself I think you've had too... well I mean, I have thought about 'too much' but it wasn't a concern. It was actually I just felt a bit rough. But since having the kids I haven't drunk loads anyway." (Natalie, MU, AUDIT-C low risk, has children).

"I think there's probably a lot of people out there that drink more [than me]... you tend to see the younger lads in there and they're sat there with pints of alcohol and stuff. But I do know quite a few of my friends will sit and have a glass of wine at home on a night. I don't do that. But it's everyone's choice." (Abigail, MU, AUDIT-C low risk, has children).

Where relevant, we asked if participants would consider reducing their alcohol use and what may help them to do so. A strong perspective across a range of participants was that they did not drink frequently or heavily enough to warrant changing their drinking, even when participants scored as having increased risks according to their AUDIT-C scores:

"I think because I drink so sporadically I don't have a red flag for myself. I think if I was just mindlessly cracking open a bottle every night or a couple of times a week or something then I think that would raise alarm bells for me. But because I don't feel like drawn to doing it on a regular basis because it is so situational I don't feel particularly worried about it or anything." (Alison, MU, AUDIT-C increased risk, has children).

"If I felt that it was something that I needed or I wanted to monitor, but I feel very in control of it. It's not something that I'm concerned about so I don't feel I need that." (Lauren, MU, AUDIT-C increased risk, has children).

Participants sometimes deliberately instituted breaks from alcohol when they noticed their drinking had escalated:

"When it was really nice weather, we were out in the garden [drinking], then... the boredom, you started to have a drink every day and then cut down after that. But never because of usage or anything like that." (Joanna, MU, AUDIT-C low risk, has children).

Two participants described being open to reducing their alcohol use, although with different levels of priority. For one participant, their elevated alcohol use was not seen as an urgent concern, while the other participant had attempted to reduce without success:

"I mean I might do but I wouldn't say it's a priority or an issue for me. It isn't something I've looked at and gone oh this is a problem and I should probably cut down on." (Kayley, MU, AUDIT-C increased risk, no children).

"I'm just trying to reduce my drinking [since dry January] but it hasn't worked yet." (Zoe, MU, AUDIT-C higher risk, no children).

Importantly, most participants did not regard alcohol as a central or salient aspect of their lifestyle. Many participants were keen to redirect the interviewer to other facets that felt more relevant and pressing for attention. For example, participants linked excessive eating more readily to stress.

"I binge eat. That's my worst thing." (Zoe, MU, AUDIT-C higher risk, no children).

"I don't drink, I eat my feelings instead." (Louise, diary participant, no AUDIT-C risk, has children).

Another participant described restricting and controlling their food as a means to feel better:

"I think I've been through a stage where I just don't eat properly, I don't eat enough. But that's better now probably than it ever has been...Yes probably deliberate thing to make myself feel better. But it doesn't work." (Leanne, MU, AUDIT low risk, has children).

There was also evidence that eating was viewed as a preferable coping mechanism to drinking alcohol, suggesting a hierarchy in the perceived risks of certain behaviours:

"If I'm stressed I would always rather eat than drink thankfully." (Vanessa, MU, AUDIT-C low risk, has children).

Table 2. A summary of Study 1's themes and subthemes

Themes	Subthemes
1. Saving (up) drinking for social occasions	i) Dispersed social networks and reunions ii) Encounters with military drinking cultures
2. Managing how I feel	i) Engendering positive feelings ii) Relieving negative feelings iii) Balancing health
3. Drinking influences: family life and rhythms	i) Everyday pressures ii) "Full Mum Duty": Alcohol use during separation iii) Drink-Weekending iv) Couples' drinking: syncing and seesawing v) "Domino effect" of military restrictions

Drinking contexts and influences

Having now summarised how participants described their drinking behaviours, we will now give more detail on the settings, contexts, motivations and influences of drinking reported by participants (Table 2). This in-depth analysis allowed us to identify the factors participants linked to their alcohol use, to see how alcohol fitted within their broader lifestyles and experiences, and to determine how these were influenced by having a partner in the military.

In the following section, we present the three main themes from Table 2 above that were generated during the analysis: 'Saving up drinking for social occasions'; 'Managing how I feel' and 'Drinking influences: family life and military rhythms', in addition to their subthemes.

Theme 1: Saving up drinking for social occasions

While participants socialised in many ways that did not involve alcohol (e.g. playing sports and attending church groups), participants named a variety of military and civilian social events and contexts in which they did drink. These events included celebrations, holidays, special occasions, military formal events, or meeting up with friends and family inside or outside the family home. Participants drinking at lower levels emphasised how their alcohol use mainly occurred during these occasions:

> *"If we were on holiday... I drank most days but other than that not really." (Danielle, MU, AUDIT-C low risk, has children).*

> *"I would drink like if my parents come which might be every eight weeks or so they probably come and stay for a couple of days and then one or two of the nights that they are there we might all share a bottle of wine with dinner. We go out for birthdays in the family or other special occasions." (Poppy, no MU, AUDIT-C low risk, has children).*

Drinking socially was not just a description of context, but it appeared to be a marker of the type of drinker participants perceived themselves to be:

"I would say it's social drinking rather than anything else." (Lucy, MU, AUDIT-C increased risk, has children).

"I think [my drinking] is socialising. I wouldn't drink on my own so to me it's a social thing, sit outside and have a glass of wine with my friend or my husband. Yes, it's a social activity." (Leanne, MU, AUDIT low risk, has children).

The theme 'Saving up drinking for social occasions' includes two subthemes. These represent the two main social contexts of drinking for our participant group:

i) Dispersed social networks and reunions

Participants who had friends and family members living nearby described drinking more regularly in social settings:

"So we go out once every other Thursday to a quiz nearby and we'll have a drink and a meal before we do the quiz. If we go to our friends' houses and they've invited us round for a drink I'll maybe have one or two." (Abigail, MU, AUDIT-C low risk, has children).

Conversely, it was evident that many participants had experienced a reduction in local social networks and that this limited their social opportunities over time. This reduction in local social connection was in part due to various responsibilities, such as having children, financial concerns and lack of time, all of which prevented their ability to go out:

"[On drinking and socialising] There's limited opportunity, also an evening thing. We don't really go out much with other people because getting a babysitter is difficult." (Poppy, no MU, AUDIT-C low risk, has children).

"I think my friendship group is very small and then obviously financial restrictions. So the two and then obviously there's childcare as well." (Carrie, MU, AUDIT-C low risk, has children).

In addition to these responsibilities, a lack of social opportunities was also attributed to military relocations. In this regard, participants described the difficulties of frequently having to establish new friendship groups, whilst trying to maintain relationships with other friends and family members over time and space. This led to challenges in retaining satisfying and/or enduring connections:

"We are all just so dotted about now that a lot of our communication is either through social media or text message but we don't really see... I've got only one military friend that I meet up with very, very regular who is a very, very good friend of mine. But otherwise it's just correspondence I suppose." (Lauren, MU, AUDIT-C increased risk, has children).

"It's quite isolating in a sense that because a lot of the spouses don't move they make their friends and then they never have to make any other friends so they're not as welcoming." (Lucy, MU, AUDIT-C increased risk, has children).

When participants were able to meet with friends from university or from their home-towns, there were references to 'saving up' alcohol and drinking in ways that were reminiscent of times when they had fewer responsibilities (i.e. before having children). Lucy described celebrating being temporarily free of her current responsibilities during a weekend away and this encouraged more drinking:

"I was given the opportunity. It was all of a sudden I was carefree, I didn't have to worry about anyone else, it was just me. And that was the whole premise for the weekend - it was a girls' weekend, we were all drinking, that sort of thing." (Lucy, MU, AUDIT-C increased risk, has children).

The logistical challenges of parenting, lack of childcare and geographical distance meant that socialising sometimes necessitated phone/video calls between participants and their loved ones:

"But most of my friends because a lot of them are military or have military connections it is literally virtual when you see them. And of course when we do see each other it is really good but we perhaps don't have the same opportunity as some people who have lived in the same place 5, 6, 7, 8, 9, 10 years". (Debbie, MU, AUDIT-C increased risk, has children).

This provided another drinking context: Zoe, for example, described living far from her family and drinking together online as helping her to conjure a sense of togetherness:

"My mum and dad like a drink as well and I think that's what encourages me to drink to feel like I'm with them, if you get me. I just sit on Facetime with my mum and we'll both drink and chat." (Zoe, MU, AUDIT-C higher risk, no children).

ii) Encountering military drinking cultures

Military social events (such as parties and balls) were a context where some participants would

deliberately save up their drinking. Molly describes the social and cultural norms and expectations around drinking in these settings to the extent that not drinking was taken as an indicator of pregnancy:

"It's the mess do in a few weekends so [I] don't want to be drinking every weekend." (Courtney, diary participant, AUDIT-C low risk, has children).

"The only time really that I would binge drink is the [military] summer party and the Christmas party where there is lots of alcohol around... there's an expectation to drink. If you don't drink you are assumed to be pregnant... it's not like a forceful thing but it's just like the wine is there on the table and people would just pour you drinks." (Molly, MU, AUDIT-C low risk, no children).

Participants described encountering military 'drinking cultures' in places where alcohol was embedded in community life within the military. This was most evident in close-knit communities, including foreign postings like Cyprus, Brunei and Germany, where drinking accompanied a feeling of cohesion and quality of life which was enhanced when participants were with other families on base:

"We did have regular weekends where we had patch parties at everyone's house. One weekend it would be in mine, next weekend would be at hers, another weekend it would be at theirs. We all used to pitch in and get drunk. We used to help with each other's children, which was a big patch spirit and it was really nice to have that group of friends." (Claire, MU, AUDIT-C increased risk, has children).

"I actually probably drunk more in Cyprus because we'd go out to a restaurant like I said four times a week and we'd have a wine to share. So I've probably actually drunk more there but I felt healthier... But definitely drinking less in the UK." (Eve, no MU, AUDIT-C increased risk, has children).

For some participants, military drinking cultures were off-putting; participants sought to differentiate their alcohol use from heavier patterns of use that they witnessed in military circles:

"In terms of other [civilian] friends versus the military, I don't think I drink any more with them than I would otherwise with my non-military pals. If we go out with a big group of my husband's friends then it can get messier. But that's actually when I stay the most sober. At some point someone has to be the voice of reason to say right we've all had enough let's go home." (Kayley, MU, AUDIT-C increased risk, no children).

The degree to which participants felt included within the military community was another key influence of their alcohol use. Within our participant group, there were examples of participants who felt connected to military communities ("I was really welcome and I never felt like I was an outsider" (Natalie, MU, AUDIT-C low risk, has children); but other participants felt excluded or chose to distance themselves from military communities which, in turn, limited their options or contexts within which to drink. This was evident in participants who lived both on and off-base. For example, Carrie described living on a different base to where her husband worked:

"I suppose we're leading more of a civilian lifestyle and also because I think my husband is away I'm not part of that community at all. I kind of don't necessarily, I suppose I don't necessarily see myself other than the fact that my husband is I don't really see myself as an Army wife so much anymore. I wouldn't know really how to be part of that community now in our scenario. I don't know how that would work." (Lauren, MU, AUDIT-C increased risk, has children).

"It... means that I'm not hugely accepted as a military wife on the base that we're at because it's [name of corps] and I'm not an [corps'] wife... So I'm not really in their crew." (Carrie, MU, AUDIT-C low risk, has children).

Theme 2: Managing how I feel

Theme 1 highlighted some of the social contexts of drinking. Theme 2 - 'Managing how I feel' - describes how some participants used alcohol to modify or balance emotions and health. This second main theme is split into three sub-themes; i) engendering positive feeling; ii) relieving negative feelings, and iii) balancing health.

i) Engendering positive feeling

Some participants reported drinking for enjoyment and reflected upon alcohol's capacity to produce a positive and pleasurable feeling; for example, alcohol provided a "buzz... I like the taste of the drinks I choose" (Poppy, no MU, AUDIT-C low risk, has children). Drinking for enjoyment was linked to bonding with others and relaxing, and was often balanced with descriptions of participants keeping to certain limits and controlling their behaviour:

"I'm sitting there talking to somebody. And it's having that, I don't know it's kind of relaxing because you are talking to somebody and then you've got just something that's quite enjoyable." (Debbie, MU, AUDIT-C increased risk, has children).

"I quite enjoy it, I think it's fine. I think it's funny. We all have a laugh. I don't get angry or anything like that. I wouldn't say I get out of control." (Lucy, MU, AUDIT-C increased risk, has children).

Others referenced how they utilised alcohol as a treat or a self-rewarding activity after a challenging day or week. This was in a different context to the social drinking described as it was often in the home and was often described positively:

"I cleaned my house from top to bottom on Friday, so on both Friday and Saturday nights I had a large glass of wine." (Kayley, MU, AUDIT-C increased risk, no children).

ii) Relieving negative feelings

The subtheme 'engendering positive feeling' alludes to the use of alcohol as a quick self-administered method to relax when time or other resources might have been less available. Some participants were more explicit that this was to assuage negative feelings, rather than to induce positive ones. This was therefore demonstrating that alcohol helped to diminish, resolve, or replace a range of negative feelings, such as stress, sadness, boredom and loneliness as a result of everyday pressures, such as work, family tensions, and stresses relating more specifically to military life. Sometimes these stresses overrode the usual, self-imposed restrictions on drinking:

"In the week normally I don't really even think about it unless it's been really stressful and then I think 'oh I will have a gin'. But again, it's quite rare in the week, I don't really think about it." (Joanna, MU, AUDIT-C low risk, has children).

"When I'm really stressed out I might drink more heavily. When my husband is away I normally avoid it but if I've had a really awful day... Every now and again if I'm low I will go overboard... In those really low periods there will be occasions where I might overdo it because I might have one glass of wine and then my reasoning is probably a little bit out of the window so I'll have another and then I'll be like 'oh I'm sad' so I'll have another." (Alison, MU, AUDIT-C increased risk, has children).

For some, stress encouraged a subconscious and habitual style of drinking more regularly:

"There's a lot of 'have a glass of wine' in the evening. Stressful day - have a glass of wine, sort of thing. We're not necessarily talking shots and excess but what ends up happening is you are having a glass of wine nearly every night or something." (Lauren, MU, AUDIT-C increased risk, has children).

The absence of husbands during military-related separation was not only reported to increase pressures upon many participants but it also intensified loneliness. Alcohol (and in some cases, eating) therefore became a means by which partners could distract themselves from their husband's absence and the associated feelings of sadness and isolation:

"I did aim not to drink any alcohol Monday – Friday but haven't managed to stick to that very well, which I feel guilty about… I felt a bit stressed by the upcoming move and also a bit lonely with my husband away so I was snacking too much, especially in the evenings." (Danielle, MU, AUDIT-C low risk, has children, excerpt taken from her diary entry).

"Just wanting to forget about it [partner being away] and just to not have to think about things isn't it? [Alcohol] takes the edge off I guess." (Alison, MU, AUDIT-C increased risk, has children).

iii) Balancing health

So far, we have explained how alcohol use was linked to both positive and negative feelings. This final subtheme highlights how alcohol use was avoided or adjusted in response to participants' health conditions and health concerns. For some participants, this meant limiting drinking to manage their weight or coping with chronic health problems:

"It wasn't in terms of being drunk or anything like that it was just thinking empty calories I suppose and the effect it's probably having on your body and just realising in general that I was like I said drinking Friday, Saturday, Sunday and just thinking you know what I'm just going to take a bit of a break from it. I think it's good to do that every now and again." (Lauren, MU, AUDIT-C increased risk, has children).

"Alcohol impacts my blood sugars [as someone with diabetes]. It keeps it in line a little bit. We probably were drinking a little bit more especially when Friday rolled round and that kind of thing of celebrate the end of the week but I was still probably drinking one in the evening, two at the most, nothing more really." (Joanna, MU, AUDIT-C low risk, has children).

Limiting drinking for health reasons extended to protecting their mental health. This included avoiding hangovers and the anxiety that alcohol creates and exacerbates:

"Then I'd always regret it the next day because you wake up with severe anxiety, oh no what have I done, what have I said or whatever and also just a terrible hangover and I realised I suppose just as part of getting older that actually I'd rather not have that the next day." (Molly, MU, AUDIT-C low risk, no children).

"If I am anxious it makes me feel sick so I wouldn't drink if I was anxious." (Abigail, MU, AUDIT-C low risk, has children).

Conversely, there were occasions where the pain or distress of physical and mental health problems precipitated drinking:

"When I've been in a depressive period. I tend to drink more then." (Zoe, MU, AUDIT-C higher risk, no children).

"I was taking quite a lot of painkillers [in my 20s] and I wasn't going out of my way to avoid alcohol and at times when my pain was really, really bad I would take Co-codamol with rum and coke… I haven't done that in a long time as my health has gradually improved." (Kayley, MU, AUDIT-C increased risk, no children).

Within this subtheme of 'Balancing health', balance also referred to the ways that lifestyles included a mix of 'healthy' and 'unhealthy' behaviours. These examples highlighted how 'unhealthy' behaviours provided other positive effects. For instance, Claire and Eve's earlier quotes illustrated that they drank more heavily in environments with more social support, better quality of life and opportunities to eat well or exercise (p. 35). Others explained how they tried to balance aspects of their lifestyle to compensate for not being 'healthy' in all areas:

"Because I can't exercise like I would then I guess it has a knock on to my food and drinking and everything like that... I try and be as healthy as I can in other areas because I can't go to the gym." (Carrie, MU, AUDIT-C low risk, has children).

Theme 3: Drinking influences: Family life and military rhythms

This third and final main theme explores the interactions between alcohol use and aspects of family responsibilities, health, social activity and military life in more depth. We specifically outline how pressures affecting many civilian families may be exaggerated by aspects of military life, such as frequency or uncertainty of relocation and military-related separation. These pressures created both barriers and facilitators to drinking. In this way, drinking was both limited/prohibited by the responsibilities of managing family life (sometimes solo when husbands were away) as well as escalating at certain periods, such as the separation-reunion cycle. These barriers and facilitators are described across five sub themes: i) Everyday pressures; ii) "Full mum duty": Dry stretches and stress-based drinking; iii) Drink-weekending; iv) Syncing up and seesawing, and v) "Domino effects" of military restrictions.

i) Everyday pressures

Participants described a range of factors that impacted their lifestyles, including work, education, illnesses, domestic and family responsibilities. We have already outlined how the stress of these factors augmented some participants' desires to drink (see page 36); but such factors also at times prevented (rather than escalated) participant drinking behaviours:

"I think because of financial constraints we don't have as much control as we would like and myself included I would probably like to do more but I can't just because of that." (Debbie, MU, AUDIT-C increased risk, has children).

Parenting also deterred some participants from drinking due to sleep deprivation and not wanting to be hungover whilst looking after children:

"[On drinking] None of my children have slept for the first two years really. [Drinking] just wasn't worth the grief." (Natalie, MU, AUDIT-C low risk, has children).

"Having my daughter and my husband being away, [there's] nothing worse than a hangover with a toddler." (Carrie, MU, AUDIT-C low risk, has children).

Further, pregnancy and breastfeeding habituated participants to not drinking as much as they used to:

"I was pregnant again and then breastfed number two for a long time again. So it was over four years of basically either being pregnant or breastfeeding. Basically after that long if that's your new normal that's a habit now." (Poppy, no MU, AUDIT-C low risk, has children).

ii) "Full Mum duty": Alcohol use during solo-parenting

Participants' narratives indicated how the logistics of military life compounded everyday pressures. This was particularly the case for parents experiencing military-related separation. Carrie's description of being on "full Mum duty" encompasses the intensity of tasks and time pressures in parenting alone during these periods. The absence of military personnel from the home due to deployments or postings meant all of the management of domestic and family responsibilities defaulted to partners who remained at home. The knock-on effect was the deprioritising of partners'

ability to engage in a range of activities - like exercising, eating and socialising - in the way they may have wanted to:

"I don't usually have time for much social stuff after I've sorted the house and children/husbands' needs." (Leanne, MU, AUDIT-C low risk, has children).

"Full Mum duty" was both a barrier and facilitator to drinking in different ways. In order to keep the household functioning, participants commonly described actively avoiding alcohol in order to be vigilant, to be able to act in case of emergencies and to be on top of increased responsibilities in the home:

"I'll have the odd drink if it's in the house when I'm doing my dinner or something but other than that no I don't tend to drink. I've always got the kids so I have to be on high alert with both children." (Claire, MU, AUDIT-C increased risk, has children).

"When I'm on my own like deployments and things I'm on my own with the kids for long periods and I don't drink at all really." (Joanna, MU, AUDIT-C low risk, has children).

Whilst "full Mum duty" encouraged 'dry' periods without alcohol, these moments were also linked to unplanned drinking as a means to relieve stress. Alison summarises the combination and accumulation of effects of military life while being a temporary 'solo-parent' upon her drinking levels by stating a number of difficult factors, including the uncertainty of deployments, juggling too many pressures and the impact that had on her mental health:

"Just the stress of it. I would definitely have not drunk as much if I didn't have to put up with everything that we ended up putting up with, with all these random deployments and never knowing where you are and having to do so much solo-parenting and running the household alone. I think that definitely took a toll on my mental health which increased the drinking. But not like military culture or anything because we don't hang out with anyone else military really." (Alison, MU, AUDIT-C increased risk, has children).

The contradiction of solo-parenting as both discouraging and encouraging drinking was evidenced in a diary entry written by Elizabeth (MU, AUDIT-C low risk, has children). She describes avoiding alcohol during the week whilst parenting alone (in addition to being the family's main earner), yet feeling incentivised to drink when learning her husband's homecoming was cancelled:

"Bad news regarding husbands next posting and accommodation so I had a drink. Unable to drink usually as I am the only person at home with my son so need to be able to drive in case of an emergency… It is what it is. It's a lonely and miserable existence sometimes, but it won't change." (Elizabeth (diary participant, MU, AUDIT-C low risk, has children).

iii) Drink-weekending

Drinking at the weekend is common for many people and can signal the end of the working week, increased social events, greater leisure time, and opportunities for relaxation. For military personnel who are 'weekending' (posted away during the week), the arrival of the weekend also marks their re-entry into the family home. This was a key context for drinking in our participant group. Being reunited with the military personnel partner at the weekend allowed participants to relax after having shouldered all the domestic and parenting demands (and the respective pressures) during the week:

"If my husband is home and it's a Friday night maybe we'll have a cider or a glass of wine or something in the evening just to chillout and be like 'oh this is nice'." (Alison, MU, increased risk, has children).

"We normally just put on a film or Netflix or something and I think because we don't get a lot of time together it's that chilling out time really that feels more social." (Joanna, MU, AUDIT-C low risk, has children).

In addition to this, the weekend enabled participants to have the company of another adult, producing a social context within the home and a space in which participants could express different aspects of their identities and bond as a couple:

"You can enjoy a drink because you know you are not going to be sleeping on the toddler's bedroom floor. So yes, it is a bit more about being back to being Natalie and Mark as opposed to just being mum and dad or like just friends." (Natalie, MU, AUDIT-C low risk, has children).

iv) Couples' drinking: syncing and seesawing

Participants' drinking sometimes aligned with the drinking behaviours of their military partner. Some participants and their husbands described drinking very little alcohol together:

"I think the last time [we drank together]… that was about two or three months ago." (Vanessa, MU, AUDIT-C low risk, has children).

"He's pretty much most of the time teetotal and when we go out. It's more we go out for dinners and things." (Molly, MU, AUDIT-C low risk, no children).

Other couples tended to drink greater amounts of alcohol when together, both during 'drink-weekending' and during other types of reunion:

"If my husband has been on leave, maybe it's Christmas leave or something we might have slipped into a habit of drinking every night or we've maybe been socialising or whatever. I think then we are just aware that we should probably cut back a little bit. It does tend to be after holidays or whatever." (Danielle, MU, AUDIT-C low risk, has children).

Syncing up drinking behaviours also occurred across longer stretches of time; Zoe explained how she stopped drinking when she met her husband (who did not drink at the time), but that they both graduated into habitual heavy drinking over time:

"I met my husband who didn't drink and then we didn't drink for the first two years we were together. And then all of a sudden it just went 'Pete Tong' and I drink every weekend." (Zoe, MU, AUDIT-C higher risk, no children).

There was also evidence that the drinking behaviours of some military personnel could lead to greater use among the non-military partners, which according to the participant quotation below, was possibly because husbands were used to a more militarised or masculinised form of alcohol use, which they then bring back into the home.

"I think he's definitely more like he'll be the one that suggests it because I think he, well for the past 7 years he's always been surrounded, he's always lived away from home pretty much. He's always lived with a bunch of guys in a base and they've got nothing better to do. So definitely way more of a drinking culture for him on a regular basis." (Alison, MU, AUDIT-C increased risk, has children).

Military personnel's drinking habits did not, however, affect all partners, with some explaining how they were the more influential party in the couple's decisions to drink:

"I think if I drink then my husband will. But not necessarily the other way around." (Lauren, MU, AUDIT-C increased risk, has children).

Some participants adjusted their drinking to offset the drinking of their partner. We have termed this 'seesawing'. In practical terms, this might occur when one partner is in charge of parenting or a designated driver: ("If we're back home and we go out with the rugby boys I'm the designated driver. And I'm OK with that." (Lauren, MU, AUDIT-C low risk, has children)). However, it also appears to have applied when participants have been concerned about their partners' drinking and felt they had to monitor the quantity and act as a 'brake' or moderating force:

"In the lockdowns he was having a drink after work more regularly. But it was self-regulated because that time he got really into gin and then he realised he'd finished a bottle a bit quicker than

he thought he was going to and then… I was like oh you are having one or two three, four times a week. And he was like oh OK I'll cut back. So yes not concerningly but it increased for a period of time." (Kayley, MU, AUDIT-C increased risk, no children).

"He just used to disappear off and drink on his own in the garden. So it's better now because I can spot it easier and I suppose back then when he was drinking if you said something to him he wouldn't accept it because he didn't have the clarity to accept it whereas he does now." (Leanne, MU, AUDIT-C low risk, has children).

v) "Domino effects" of military restrictions

Through the narratives presented, we have identified how participants' lifestyles were influenced by a mix of family pressures, work-life and military rhythms. Some experiences relating to military life seemed to exacerbate the everyday pressures, particularly the disruptions and unpredictability around times of separation and relocation. These are all factors that fit with Cramm et al.'s (23) three dimensions of PSP families' lifestyles (described on p.18). The three most influential military-related factors influencing drinking behaviours and other aspects of our participants' lifestyles were:

a) Separation (i.e. husbands' absence from the home):

"My husband had a particularly busy job where he was away a lot overseas at short notice and not for very long but he was completely unreliable in terms of childcare. And it became more difficult than it felt like it was worth for me to work basically." (Danielle, MU, AUDIT-C low risk, has children).

b) The disruptions of relocating:

"The guys or whoever the serving person is fine because they go from the one job to another so they are secure. It's the partners and the kids that have got to then start afresh really. And it's whether or not do I want to stick it out for another year or do we want to go and start afresh? I'm not sure at the moment." (Harriette, MU, AUDIT-C low risk, children).

c) Uncertainty stemming from these separations and relocations;

"The uncertainty of not knowing where you are going to go next, so you never really settle and put down roots because like we've just been here for two years and now it's just been extended for another two years." (Molly, MU, AUDIT-C low risk, no children).

Narratives indicated how the logistics of separation, relocation and uncertainty fed down into the lifestyle behaviours of participants. This impacted their drinking (i.e. stress-based drinking for Alison below), but also had a "domino effect" upon all other aspects of life. This was most effectively illustrated by looking at participants' narratives who felt that the return of their husbands coming home brought exponentially positive effects:

"I like now my husband is home [drinking] is a lot less likely to happen, because he would ask me if I was OK... I think now my husband is home... I am eating mindfully. I'm exercising fairly regularly. I have time to myself. I'm starting to flex that muscle of having more of a social life. If you asked me [about how much control I have] when he was away the answer would be absolutely not, no." (Alison, MU, AUDIT-C increased risk, has children).

"My kids would probably say I'm happier when he's here. I'm more relaxed. I know that in myself because I'm not having to do everything. I'm not having to make every decision, I'm not having to think about everything and I think he's found it interesting coming home being with the kids all the time just because he's never really done that and thinking about them is a shift I suppose for him... But they are more settled, they are more content. It's like a whole domino effect I suppose." (Leanne, MU, AUDIT-C low risk, has children).

The relief of husbands' presence in the home was most powerfully exemplified by one partner whose husband had since left the military. Within her interview, Natalie described ongoing constraints related to parenting, but also reflected on having a lot more choice now that her husband had left the military:

"I didn't have a lot of choice because I couldn't... whereas now my husband will look after the kids while I go on a run or go to netball... there wasn't a lot of control [when in Service]. It was quite hard. Whereas now I do what I want. Pretty much." (Natalie, MU, AUDIT-C low risk, has children).

The domino effects of these three key military factors (i.e. separation, relocation and uncertainty) determined much of the capacities and resources participants could use to support themselves and their families, including the availability of, or ability to access, supports; their ability to make future plans and how much time they had. This also appeared to inform their sense of identity. For example, Alison reflected on having greater freedom to plan activities in the evenings once her husband had returned home - "it's feeling like I'm a person who does things". This ability to 'do things' and make even the smallest decisions about how one's life is lived indicates a desire to be able to exercise some autonomy in the face of military restrictions:

"I can control the small things if that makes sense. I can control what I eat, I can control what I do, but I can't control what's going to happen in the next couple of months as far as where my husband is going to be or if he's going to be able to help out or if I need to find childcare because realistically if he's going to be going away for five to six weeks, the three weeks that was probably my limit of being OK." (Vanessa, MU, AUDIT-C low risk, has children).

Restrictions appeared to be felt less intensely by participants whose partners were of higher rank and had more decision-making powers, whose children were a little older, or who did not have children. For some of these participants, the 'hand' of the military was not viewed as influential:

"I think if we've had stresses in our lives or whatever I don't think it's necessarily related to the military lifestyle. I think it's just one of those personal things isn't it." (Danielle, MU, AUDIT-C low risk, has children).

Box 2. Help-seeking perceptions

Up until this point, we have presented findings relating to military partners' drinking perceptions, contexts and influences. In preparation for Study 2 (a scoping review of alcohol supports and programmes), this final section reflects upon the participants' perceptions around help-seeking and supports for their alcohol use.

Participants across a range of risk levels did not wish to change their alcohol use and did not seem incentivised to use supports. There were examples of participants initiating their own breaks from alcohol after becoming aware of their heavier use. Reductions sometimes occurred naturally and did not require deliberate effort: ("I think it just naturally tailed off", Olivia, MU, AUDIT-C low risk, no children). As a result, there was little data outlining the kinds of supports that participants would find helpful in decreasing their alcohol use.

However, regarding their health and wellbeing more broadly, the participant group was generally proactive in seeking supports for themselves and their families, turning to a range of providers, including healthcare and military welfare services. For example, participants mentioned marriage counselling, Improving Access to Psychological Therapies (IAPT) for anxiety, and assessments for their children's SEND, all with varying experiences of success. Others described trying to manage issues on their own. Reflecting on her difficulties with restricting her eating, Leanne stated:

"I just sort of got on with it really. I think my sensible head took over and actually thinking that's not right... I think I'm aware of that now and so I make a conscious effort not to". (Leanne, MU, AUDIT-C low risk, has children).

When asking participants what they would find supportive for their lifestyles, participants tended not to focus upon any one behaviour in isolation but made suggestions that would support a series of basic needs; for example, support with childcare to alleviate pressures that were preventing them from socialising, and eating more thoughtfully and exercising in the ways that they would like.

Participants further described how supports received were compromised at times by knock on effects of military life. For example, participants explained interruptions to treatment for health problems due to relocation; confusion about what support could be accessed in new locations, and geographical variation with some places being under-serviced or not having the support that is needed:

"You can't get on the NHS with any dentist because I'm not here long enough. So it's things like that. It's the access to the health care system that is there but there are so many barriers for military wives". (Zoe, MU, AUDIT-C higher risk, no children).

These barriers placed additional pressures upon military partners, which in turn affected the lifestyle choices they were able to make.

Summary of findings

Participants' drinking patterns and perceptions

- Most participants did not identify as being a 'big drinker' despite some of their AUDIT-C scores indicating otherwise (i.e. drinking at some level of risk (AUDIT-C)). The assessment of not being a big drinker appeared to be based on comparisons with others, their own historical drinking and their ability to adhere to a range of different rules like not drinking in the home, not midweek, not to get drunk and/or not in isolation.
- Some participants naturally reduced or were able to institute breaks when noticing escalations in their drinking and reduced their use without needing support. The finding that participants did not want support for their alcohol use may be due to the lower risk levels of drinking that our participants (reportedly) engaged in.
- Alcohol was not perceived as a central aspect of the lifestyle of almost all participants; rather they were more concerned about other lifestyle aspects, such as eating and exercise.

Drinking contexts and influences

Theme 1: Saving up drinking for social occasions

- Alcohol use increased when partners described living within tight-knit 'patch' communities, when near friends and family members, when they could attend reunions with friends living in other places, and when attending military formal events.
- Some participants reflected on how reaching a more mature life-stage, busy lifestyles and having children reduced opportunities to socialise and drink.
- Reduced opportunities for alcohol use were compounded by some military-specific factors, including finding it hard to maintain social connections due to frequent relocations and not feeling bonded to the military community as a whole.
- Partners' drinking was therefore often 'saved up' for when they had the time and opportunity.

Theme 2: Managing how I feel

- There was evidence of alcohol being used to encourage positive feelings as a reward or because it was enjoyable; however a more prominent narrative was that alcohol was used by partners to relieve negative feelings, including stress, boredom, loneliness and sadness.
- Participants described avoiding or adjusting their alcohol use to take into consideration their health problems or health concerns.

Theme 3: Drinking, family life and military rhythms

- Overall, partners' narratives showed how their drinking (and lifestyles more generally) were influenced by everyday pressures, such as work, health, finances and family life, but also how these were exacerbated by the logistics of military life - especially separation and relocation.
- Militarised restrictions acted as both barriers and drivers of drinking. Drinking behaviours therefore looked like:

  1) periods of abstinence during military-related separation when partners single-handedly managed domestic and parenting duties (on top of their own employment and other concerns) with limited support;

2) unplanned or more impulsive drinking during military-related separation to relieve feelings of stress, loneliness and boredom;
3) reunion-based drinking when military personnel were back from deployments/postings and when couples could relax together and responsibilities could be shared;
4) reunion-based drinking with friends and family (often around the country as a result of geographical relocations), leading to a 'saving up' of alcohol that could lead to drinking greater amounts than usual;
5) the syncing and seesawing of alcohol use which saw some partners drink more within partnerships where military personnel had habituated to heavier drinking military environments during the working week, while other partners drank less if there were concerned about their military partners' drinking.

- Specifically, we found that the extent and frequencies of 1. separation, 2.relocation, and 3. uncertainty about both separation and relocation, had a knock-on effect on various partner lifestyle behaviours, affecting participants' capacities and resources, the availability of, and ability to access, supports; the time they had to meet their needs and responsibilities, the time for leisure and time to make future plans. These, in turn, had far-reaching impacts upon partners' feelings of autonomy and wellbeing.

Study 2: Current programmes for reducing alcohol consumption among military partners

The following section outlines the second study of this project. After having asked military partners about their experiences of alcohol use, we sought to identify programmes that might be available to support military partners who want to address their alcohol use.

Background

Within the UK, healthcare for military partners is largely the responsibility of the National Health Services (NHS). The NHS follows the National Institute for Healthcare and Excellence (NICE) guidelines for the prevention, identification, assessments and treatment pathways related to alcohol use (53, 54). NICE offers guidelines for the price, licensing and marketing of alcohol as part of a prevention strategies, along with routine screening using brief interventions to identify alcohol problems and co-morbidities. Individuals misusing alcohol are treated in community-based settings via interventions supporting alcohol reduction and/or are given information on community support and self-help networks. For those with harmful levels of drinking, behavioural and psychological interventions are considered, and those drinking at dependent levels may be eligible for pharmacologic treatments in outpatient settings, in the first instance. The availability of NHS-led provisions varies geographically, contributing to an uneven resource-landscape that has been previously termed a 'postcode lottery'. For example, recent research based on national datasets in England found that areas most in need of specialist alcohol treatments do not receive increased funding, and increases in alcohol-related hospital admissions may be driven in part by cuts to local authority funding for specialist alcohol treatments (55).

Third sector organisations exist that can support civilians looking to address or moderate their alcohol use, including localised peer support groups (e.g. Alcoholic Anonymous); online methods via

mobile/digital applications, or participating in national campaigns such as Dry January. Supports from the military's Defence Medical Services or their Welfare section do not necessarily provide programmes supporting military partners directly, but signpost to health-based supports within the NHS or charitable sector.

A service-mapping exercise conducted as part of the UK Veterans Family Study highlighted the advantages of services that cater for the family members of military and ex-military personnel (56), particularly the perceived shorter waiting times for specialist care, such as counselling, compared to the general population. This difference was attributed to the COVID-19 pandemic, which exacerbated mental health issues in the general population and extended waiting times resulting from the backlog within the statutory sector. The study also emphasised the importance of supportive peer relationships among family members due to the commonality in their shared experiences. Moreover, there was a notable preference demonstrated by the family members of (ex-) military personnel for support services to be staffed by individuals with lived military experience as a result of their shared understanding of the challenges faced by military families.

Aim

The aim of this mapping exercise was to identify current services, programmes, digital products, and supports that support military partners to reduce their alcohol consumption and improve drinking behaviours (objective 3).

Methods

- Three online search methods were used to identify services that may be available to the partners of (ex-)military personnel who would like support with their alcohol use:
  - A mapping exercise which involved searching for programmes and provisions from the viewpoint of a partner looking for help with their alcohol use. The search was completed by one researcher between February and March 2024 and used extensive search-term combinations on Google Chrome and Microsoft Edge, such as 'help with alcohol' or 'how to stop drinking', and concluded when each combination failed to yield any new results. The Confederation of Service Charities (Cobseo) website and Veterans' Gateway[7] were also searched.
  - Consultation with the research study's expert Advisory Panel (members of the MoD, NHS and Third Sector) and wider stakeholders to supplement the mapping exercise list of programmes/providers. The panel were emailed the initial list of identified organisations via email and provided details of any additional organisations or programmes they thought were missing. This yielded two additional organisations.
  - Literature reviews to identify alcohol interventions aimed at adult civilian women and some military-connected populations.
- Once identified, organisations and services were reviewed to establish their geographical location, population focus, available services, eligibility criteria, referral process, target drinking behaviours and severity, the terminologies used around alcohol use, and treatment of comorbidities (e.g., alcohol and substance misuse). Where available, the effectiveness of programmes and interventions identified via consultation or literature review was captured.

Inclusion and exclusion criteria

- The mapping exercise took into account alcohol supports aimed at the general population, military personnel, ex-military personnel, and the family members thereof.
- Supports aimed at (ex-)military personnel specifically were included as, although family

[7]Veterans' Gateway was available at the time of the search. The Veterans News and Communications Hub has now replaced the service and is provided by the Office For Veterans' Affairs, see: https://www.gov.uk/guidance/veterans-news-and-communications-hub

members were likely to be ineligible, such programmes could be adapted to meet families' needs given their understanding of the military context.

- Digital alcohol applications (apps) were included if they were signposted to by providers or the stakeholders of this project. A detailed search of app stores was not conducted due the highly competitive, over-saturated nature of the market and was outside the scope of this research.
- Private service providers, inpatient residential treatments and pharmacological treatments were excluded, as were any service providers based outside of the UK.

Box 3: Experience of conducting the search

The team faced unexpected challenges when searching for general population and military alcohol-based services. Search outcomes varied across different search engines (Google Chrome and Microsoft Edge). Private rehabilitation facilities and clinics that likely pay for advertising were heavily represented in the search results. Although some military family members express a preference for military-specific services due to the enhanced understanding and empathy they receive (56), identifying organisations that catered to specific demographics (like being part of a military family) was not straightforward.

As the search progressed, it became evident that many services were interconnected, inadvertently creating the illusion of a higher number of services offering practical assistance than was actually available. Several providers offered helplines or online chat support and directed individuals to other organisations for more comprehensive assistance beyond their listening services. Notably, SMART Recovery and Alcoholics Anonymous (AA) emerged as a frequent programme being signposted to.

Findings

The following section gives an overview of the identified supports, including providers and programmes; a summary of the terminologies of alcohol use used by providers; and a review of programmes by population and by type. Effectiveness was captured where possible and outlined in the 'programmes by type' section. These findings are designed to be a summary of the landscape; we have included counts and numbers where possible and where most informative.

1. An overview of the identified supports

The mapping exercise, stakeholder consultation and review of published literature identified 38 individual providers offering a total of 50 programmes available to the family members of (ex-)military personnel wishing to reduce their alcohol consumption. The full list of programmes can be found in the Supplementary Materials (Appendix: Table b).

Of the 38 providers:

- 33 serviced the general population:
  - 6 of the 33 also had a separate specialised military programme.
- 5 were providers servicing the Armed Forces community specifically.

Of the 50 programmes:

- Most programmes were available UK-wide (N=27). Of the remainder, the majority were based in England (N=8) or available remotely (N=7), with minimal services specific to Northern Ireland, Wales and Scotland (<5 each).
- 32 were aimed at the general population.
- 4 supported families in the general population where individuals were struggling as the result of another family members' alcohol use.
- 14 programmes were aimed at the Armed Forces community:
  - 6 of the 14 were specialised programmes from general population providers; 8 were from (ex-) military-specific providers.

Of the 14:

- 6 were for either military or ex-military personnel.
- 5 were exclusively for ex-military personnel.
- 3 were for military family members, but focused on supporting them with the alcohol use of their (ex-)military family member.

The majority of identified providers were charities offering free resources like helplines (phone, email, text), educational literature, videos, and support groups. Aside from providers who offered only helplines, most providers offered multiple kinds of programmes, including self-help, peer support and brief alcohol interventions. While more clinically-based services such as counselling and medical care were available at no cost within the NHS, they often came with certain limitations or eligibility requirements. For instance, providers might offer a limited number of counselling sessions and these might be reserved for individuals with 'higher needs' such as severe co-occurring physical/mental health conditions and homelessness. In some cases (GSST clinical care suites), some of these services could not be accessed via self-referral (unlike most other services identified).

2. Terminology used

Providers employed a range of terminology to describe the alcohol use of their target service-users. Some opted for more inclusive language reflecting lower levels of drinking, such as "concerns about drinking" (Change Grow Live, London Friend) and "affected/worried about alcohol use" (Alcohol Change UK). Similarly, "drinking mindfully" (Club Soda) and "cut down on your drinking or go totally alcohol-free" (Try Dry) appeared to target individuals aiming to reduce, rather than completely abstain from alcohol, as part of a healthier lifestyle.

Other terms were more 'problem-focused' and aimed at greater concern about use or more difficulties arising from alcohol. This included terms such as "alcohol misuse" (Kaleidoscope, Barod), "alcohol issues" (Turning Point, Forward Trust), and "problematic behaviour including addiction to alcohol" (SMART Recovery). Terms such as "alcohol problems" (Dan 24/7, Drugs and Alcohol Northern Ireland, NHS) and "problem drinking" (Alcoholics Anonymous) may resonate with individuals who identify as having a drinking problem and are seeking a specific level of assistance. Guy's And St Thomas' (GSST) described their alcohol programme as being for individuals with "severe alcohol dependence", reflecting the clinical care reserved for those with 'higher needs' on the drinking severity spectrum. Other providers, who were targeting drinking linked to goals of abstinence, preferred to focus upon the positive outcome of treatment, such as "alcohol recovery" (Humankind, Sober Grid) and "sobriety" (Soberistas) rather than problems, addiction or dependence.

3. Programmes by population

General population supports Almost a third of programmes for the general population ran a helpline or online chat service (e.g. stand-alone listening sessions that are not part of ongoing programme) as well as signposting services. Access to these supports are at the individual's discretion. Other programmes included psychosocial interventions, most frequently in the form of support groups or 1-1 support online or over the phone. In contrast to the helplines/online chats, these interventions tended to be more structured, delivered over a number of sessions, and be on set dates and times. Whilst most providers had national reach, smaller providers tended to have a more focused outreach, for example London Friend and Changing Lives who were serving London and York, respectively.

All general population programmes were eligible for self-referral, with some including referral via a family member or friend. Most provided care for other co-occurring issues, such as other substance use issues, mental health, employment, housing, and offending/criminal justice assistance. A portion

of programmes also offered clinical care (which frequently came with stipulations of receiving access to GP records); these programmes tended to have more stringent eligibility criteria, such as severity of the individuals' condition, however it was not always clear how or by whom this would be assessed.

Supports for (ex-)military populations

Identifying general population providers who were running (ex)military-specific programmes was mostly straightforward. This was often signalled by the programme's name, such as "We Are With You's Armed Forces Community Programme". Some ex-military programmes (SMART veterans) were readily accessible via their website, although details about the care provided tended to be less clear than the details provided in the non-military programmes. For instance, general population programmes might list the programme content step by step, whereas (ex-)military programmes tended to be less explicit.

Some providers emphasised an adaptation from a general population model, including 'enhanced consideration of post-traumatic stress disorder (PTSD)' and 'self-medication after combat-related trauma'; but it was not often specified how models had been tailored to meet the needs of the (ex-) military community and whether they had been evaluated for effectiveness. As with programmes for general population families, programmes for the families of (ex-)military personnel focused on helping them to manage the impacts of the alcohol use of (ex-)military personnel rather than any alcohol issue they themselves may need help with.

The providers targeting (ex-)military populations offered a range of programmes aimed at supporting (ex-)military personnel who were dealing with alcohol-related issues. Helplines and online chat supports were common and, whilst some providers like SMART emphasised a more structured recovery programme, others prioritised personalised support with elements like goal-setting, progress tracking, and coping strategies (e.g. VetChange). Some providers, such as Combat Stress, combined the two so offered both approaches. Remote support featured heavily, including online support groups and 1-1 meetings, overcoming geographical barriers to facilitate access and allowing potential users to remain anonymous should they wish. All of the identified (ex-)military programmes offered psychosocial interventions and were accessible via self-referral. Peer support, whether through group meetings or peer mentors, was available in over a quarter of the military programmes, and a few others offered further support or referral to clinical interventions such as rehabilitation facilities and medical detox. Assistance with issues that may be comorbid with alcohol misuse, such as mental health, misuse of other substances, and housing, was also commonly provided.

4. Programmes by type

App-based; helplines; online chat support

Alcohol apps advertised by some of the providers (N=6) mainly targeted members of the general population and were predominantly self-help tools by nature. Some, such as Drinks Meter, focused upon individualised information by tailoring health risks based on the data the user enters, such as individual and family medical history, pregnancy, and whether drugs are consumed whilst drinking. Drinks Meter users are also shown how their drinking compares with other users to 'benchmark' their usage.

DrinksRation, a 28-day brief alcohol intervention delivered via a mobile app, was the only alcohol app for specific use within military communities that we identified. The app's efficacy was tested in ex-military personnel, with findings showing that that for those individuals who had used DrinksRation, their alcohol consumption reduced to a greater extent than ex-military personnel who had received guidance only (6).

The app's usability was also assessed (by ex-military personnel and experts), where it received high scores for useability, and was regarded as simple to engage with and appropriate for ex-military personnel (57). The app also incorporates push notifications which, according to research, have been shown to be effective as methods of post-initial intervention reinforcement (58). Overall, evidence shows that users have had positive experiences engaging with app-based alcohol interventions, though such apps can have quite different content; for example, drawing on motivational and CBT techniques or incorporating two-way messaging interactions (58-61)).
The main advantage of both helplines and apps is that they can be accessed remotely and have very few eligibility criteria, therefore potentially catering to individuals on all levels of the drinking severity spectrum. However, there is a lack of literature testing the effectiveness of such programmes and little is known about whether this meets the needs of those with more complex issues who require more follow-up support.

Psychoeducational self-help resources

Psychoeducation and self-help resources generally appear to be effective in reducing alcohol use (62, 63), particularly over the long-term (64). The majority of identified programmes offered some kind of psychoeducational material regardless of the targeted level of drinking. This was often delivered via interactive elements like quizzes or games and was also available in plain written form using lay language. Short videos were common and some included testimonies from current or former drinkers. Engagement with self-help resources requires people to be self-motivated (65), which may mean such programmes are less effective if used on their own for higher level drinkers who may experience more difficulties controlling their alcohol use. However, these resources are arguably the easiest to access suggesting they can be suitable as a key resource for mitigating alcohol use for those with lower levels of risk.

Peer support

Peer support for alcohol issues was identified across different programmes and populations, the latter including in general population and (ex-)military contexts. Peer support was most frequently available in the form of support groups, where those experiencing similar issues can access group programmes and informal support together, often with the options of attending in person or online (e.g. AA, AdFam, Combat Stress, Adferiad and DrugFAM). Peer support was also delivered through having trained peer volunteers/workers directly providing support (e.g. Combat Stress's peer recovery workers and Adferiad's veteran peer mentoring). Some providers for the general population, however, required a fee be paid to access peer resources (such as specific courses or community groups); the actual amount to be paid after a free seven-day trial was sometimes unclear. The demographic for these paid communities would likely be those with more disposable income.

Brief alcohol interventions

The mapping exercise found that many programmes incorporate features of brief alcohol interventions (BAIs). A BAI aims to motivate individuals to reduce their alcohol consumption by employing motivational interviewing techniques to provide personalised feedback, set goals, and discuss strategies for reducing drinking (66, 67).

BAIs can have many modes of delivery, including app-based, face-to-face, and over the telephone. According to the literature, BAIs have shown mixed effectiveness; however, this may be explained by the varying study designs and foci on different aspects of drinking (e.g. binge drinking vs general consumption), the time periods being used (weekly alcohol consumption vs monthly), and their mode of delivery. Research suggests that there may also be questions about whether the effectiveness of BAIs lasts over time (68).

Therapeutic services

Specific interventions with alcohol reduction as a therapeutic goal, such as the SMART Veterans programme, drew from a range of therapeutic techniques (e.g. CBT), and were mostly on offer for those with co-occurring psychological/mental health problems or more severe levels of drinking that required specialist support. Examples of family therapeutic providers include Scottish Families Affected by Drugs And Alcohol (SFAD) who provide counselling for people bereaved by a loved one's harmful use of drug or alcohol, and DrugFAM, who provide counselling for family, friends and carers affected or bereaved by a loved one's harmful use of drugs, alcohol or gambling. Restrictions on the number of sessions were common, as well as the therapeutic services having a higher threshold of eligibility.

According to the literature, therapeutic interventions have varied effectiveness and draw on a range of philosophies and modalities like CBT; (69), acceptance and commitment therapy (ACT; (70), and motivational interviewing (MI) (70, 71). Some therapeutic interventions have been shown to successfully decrease alcohol use;, however, they have been largely criticised for results that rely on qualitative methods or small sample sizes (70). These types of interventions (and the research testing them) typically have high rates of drop-out (72), though mindfulness-based treatments have generally shown higher retention.

Summary of findings

- A total of 50 different programmes were identified. Thirty-two were aimed at the general population; 4 supported members of the general population with other family members' alcohol use; 11 were for military personnel or ex-military personnel, and 3 were available to military family members but only to support them in managing the alcohol use of the (ex-)military family member.
- There was a range of UK-wide providers and remote options, including app-based supports, helplines, psychoeducational resources, peer support groups, programmes that incorporate BAIs, and therapeutic services. Helplines and peer support groups appeared to be the most common amongst the identified programmes.
- Whilst programmes tailored to (ex-)military populations were available, there was often a lack of clarity and specificity about what the provision entailed (compared to the greater detail provided for general population programmes), and whether family members would be eligible. Some programmes appeared to be based on specific recovery models and were modified for military-connected service-users, yet it was not clear how these had been tailored.
- Whilst family members of (ex-)military personnel can access the same range of programmes as the general population, we did not identify any services that were cognisant of the unique experiences of military life which could otherwise better support family members with their own alcohol use.
- Whilst we have provided some background into the effectiveness of different modalities, this does not reflect the specific efficacy of the programmes outlined. There was a lack of information about how and whether the programmes cited had been evaluated.
- Research suggests that psychoeducation and self-help resources are effective which, together with the fact they can be easily accessed, may mean these supports are particularly useful for partners to integrate into their busy lives and allow them to make changes to their alcohol use independently. However, research does acknowledge that such materials may be less effective for those suffering from the higher end of alcohol misuse who may experience more difficulties controlling their use.

Discussion

Summary of the main findings

This study aimed to explore the alcohol use of the partners of UK military personnel and the factors that influence their drinking. In Study 1, we identified a range of both everyday and military-specific pressures that acted both as barriers and facilitators to drinking. For instance, military-related separation led to periods of abstinence when partners were left on their own to manage domestic and parenting duties without support (barrier) as well as encouraging partners to drink more impulsively to relieve feelings of stress, loneliness, isolation and boredom (facilitator). Being reunited with husbands returning to the family home led to greater drinking when partners were relieved from 'full-time Mum duty' (facilitator); however, this also led some to drink less in order to discourage their partners from bringing heavy drinking back into the home (barrier). Frequent relocations led to dispersed social networks which, combined with everyday responsibilities, reduced participants' opportunities to drink socially (barrier), while also leading participants to 'save up' their drinking for reunions with friends and family (facilitator). Our findings illustrate how the logistics of military life can intersect with the everyday pressures of work, family and household responsibilities, and social networking, which in turn, can influence participants' drinking behaviours. Study 2 further highlighted the main types of alcohol supports available to the general population and (ex-)military partners, but found a lack of (ex-) military-specific programmes that could support family members directly with their alcohol use in a contextually military-aware way, a lack of clarity about the content of such specific supports, and a lack of clarity around whether programmes had been evaluated.

Influences on military partner drinking (Study 1)

A recurring question often concerns whether military families are special or different to the general population. Indeed, via the themes and subthemes presented, we highlighted a breadth of facilitators to drinking that are common across all populations, including drinking to relax at the end of the working week, celebrating special occasions, socialising, and relieving stress (73-77). However, we found that these factors were heavily shaped by key military restrictions. In particular, military-related separations (which can be long, frequent and can involve risk to military personnel's wellbeing or life), frequent relocations, and uncertainty about postings all had a heavy influence upon partners' drinking as well as on their broader lifestyle and feelings of autonomy and wellbeing. Some of these experiences are also found in civilian populations, yet the multiple logistical, risks and identity-aspects of having a partner in the military can stack up, as explained by Cramm et al.'s model presented on p. 17 (23).

In the following section, we discuss how military life intersected with participants' drinking:

- **Contact with 'military drinking cultures':** There was evidence within the interviews that being part of close-knit military communities or attending military social events encouraged drinking. These spaces may be linked to cultural norms around heavy drinking, as well as access to cheaper and more readily available alcohol (78). However, there was a diversity in how involved and included participants felt in military communities, with many not appearing to fully associate with 'military drinking cultures', and most not feeling embedded strongly within

military communities (irrespective of whether living on base, on military streets or in civilian housing). Overall, we found 'military drinking cultures' were not the main military-related factors influencing participants' drinking.

- **Dispersed social networks:** The nature of participants' social networks acted as a barrier or facilitator to drinking depending on the context. Many participants described difficulties maintaining social connections due their distance from friends and family and being uprooted by relocations to new areas where they knew no one. This was echoed in a US study, which found moving frequently and living far from loved ones were barriers to social connection (31). Shallow or dispersed friendships reduced social opportunities to drink, and led some participants to 'save up drinking' for times when they were able to arrange meet-ups or attend reunions in-person to socialise. Virtual socialising, which sometimes involved drinking, allowed participants to sustain more distanced connections. It is possible that drinking online has become more prominent with the increasing digitisation of communications, the normalisation of these methods during the COVID-19 pandemic, and the various ways military families have attempted to sustain long-distance social relationships (79-82).

- **Managing the stressors of separation:** Partners with children often avoided alcohol when military personnel were posted away midweek or deployed due to the necessity to single-handedly cope with responsibilities that would otherwise be shared (e.g. domestic labour and parenting demands on top of their own employment). However, we also found evidence that the pressures of separation led to participants drinking to relieve negative feelings (stress where separation may involve risk to military partner's life, sadness, loneliness and boredom). This may explain the links between alcohol outcomes and separation found in other literature identified within our systematic review (2, 4), where alcohol may serve as a coping strategy. This may lend some context to the links between alcohol use, psychological distress and mental health problems found in our systematic review (5, 42, 43, 83). Pressures relating to separation sometimes overrode participant intentions to stay sober when military personnel were away. Other studies in the general population have also found that the accumulation of stressors can increase impulsive drinking (84, 85).

- **Drinking when reunited with 'weekending' military personnel:** To describe drinking in the reunion after husband-partner separation, we devised the term 'drink-weekending'. This marked drinking at the end of a working week between partners, where partners could relax together and temporarily return to sharing household and parenting responsibilities. Prior US-based research described how Naval personnel themselves experience 'dry' stretches on deployment that were bookended by heavy drinking on their return home (i.e. drinking during 'deployment liberty' (86)). Our findings indicate that this 'liberty' effect is mirrored by partners themselves when they are no longer 'on duty' singularly managing all responsibilities. This 'return home' led to participants sometimes 'syncing up' their drinking with military personnel, increasing their usage towards that of personnel who were sometimes habituated to drinking more heavily. This supports prior findings that, in both non-military (87) and US military (16, 88) populations, members of a couple tend to drink in similar ways. Our systematic review also found a syncing of couple's drinking behaviours, where, for example, military personnel's heavier drinking habits were 'a risk factor' for their partner's drinking habits (89).
- In contrast to the 'syncing up' in these

behaviours, we also saw how partners curtailed their drinking or discouraged their military partner's drinking if they had concerns about the latter's alcohol use. This is consistent with other work indicating that women often take on the responsibilities of monitoring and managing the health of family members (31), something which is perhaps enhanced in military settings where a substantial minority of personnel can experience greater mental health problems and alcohol misuse than the general population and where partners may have to assume caregiving roles (13, 14, 38, 39).

Findings overall demonstrate the nuances of how life factors influence drinking. The on/off nature of drinking in relation to everyday responsibilities and military rhythms may further shed light on the propensities of military spouses/partners to consume more alcohol per drinking occasion and to engage at times in binge-drinking, as found in previous research (4, 5).

Understanding participant perceptions of their alcohol use

Although not indicative of alcohol misuse and risky drinking among a wider population of military partners, we did find some of our participants were drinking at levels that indicated increased-to-high risks of alcohol misuse (AUDIT-C≥5) (77). Many of those classed as low-risk scored 4 – only one point away from meeting criteria for risky drinking. Despite this, few considered alcohol as a central part of their lives. Under-estimating the amount we drink, and therefore the potential impact on our health, is common but provides an interesting reflection on how we seek to measure alcohol use and how we interpret the results.

There were some reflections stemming from how participants perceived their drinking and why risk may be underestimated:

- There may be a lack of awareness around what levels and frequencies of alcohol use constitute 'risky' drinking, particularly if drinking does not adhere to the more typical stereotypes of problematic drinking (91, 92).
- Ebbs and flows in drinking can produce 'uneven' patterns (93) making it difficult to calculate and notice one's own risks. Indeed, the 'in flux' nature of drinking behaviours was evident in participants' diary entries where they recorded the alcoholic units consumed per day.
- People may not necessarily experience the health or social consequences that may make them feel their drinking is problematic. In this way, the negative consequences of drinking can be invisible, particularly if people can still fulfil their commitments. For example, Ling et al. (2015) found that 'safe' levels of alcohol consumption were determined by participants' feelings of whether they felt healthy or whether they experienced negative effects over more abstract guidelines of amounts that may be publicised by public health messages and government guidance (91, 92, 94).
- People may not want to think or report that they are engaging in risky drinking. This could introduce a 'social desirability effect' (95). This may be most pronounced amongst women with children, where the image of a caring and committed mother may be at odds with being a 'heavy drinker' (42, 96). This illustrates how identities, as much as logistics and risks (23) could have an influence upon participants' drinking. In the present study, participants raised their identities when describing whether they interacted and identified with military (drinking) cultures and communities, when framing themselves as social drinkers, when reflecting on their role in their couples and in considering how their drinking was limited, or activated, by pressures at work and as a parent. This supports other work that highlights the centrality of identity for military partners (40, 97, 98).

Available alcohol supports for military partners (Study 2)

The mapping exercise of alcohol supports allowed us to identify provisions for alcohol support across general population, military and ex-military sectors. The organisations listed in Table 3 (see Appendix) reflect those that were found via various search strategies online, consultation with stakeholders, and systematic reviews of published literature. While we are confident that the mapping exercise captured most services available to military partners and families, it is possible that more localised and specialised services were missed. However, by conducting an online search as if we were a service user, we were able to identify those most likely to be viewed and potentially approached by partners seeking support.

The general support identified was varied and diverse in terms of language used, how support was delivered, formality of the services, and the modes of support offered (i.e. from the psychoeducational to the more therapeutic, the latter being for those with more severe alcohol use and psychological comorbidities). This is encouraging since individuals may be drawn to different options based on their personal preference. For example, peer support programmes may appeal to partners who have a preference for informal supports provided by those with military experience (99). Findings from research with veteran family members suggest informal supports are favoured by this group which may be similar for those still in service (8).

With regards to the language used around alcohol, there are shifting trends in the medical community and in society more broadly about what terminologies are acceptable/stigmatising (100-103). The full range of terminologies used to describe alcohol use could, on the one hand, help individuals to find a programme that aligns with their self-perception and readiness to change (which in turn, could enhance their level of engagement and treatment outcomes); however, some terms may be off-putting and stigmatising, such as 'abuse' which may infer a level of blame and induce feelings of shame (103). The variety of terms to describe alcohol use may also cause confusion or difficulty in identifying the most appropriate programme for the needs of the person seeking help.

Some delivery approaches, such as apps and online forums, may be beneficial for partners who are managing complicated logistical issues around family life. However, information about who was eligible to receive supports and what the programmes entailed was not always clear for programmes catering to (ex-)military populations compared to those targeting the general population. While some partners may be content to seek support from NHS services, others may wish their provider to have some understanding of the realities of military life to better understand and support behaviour change, as noted among prior research on family members of ex-military personnel (56).

Information about alcohol supports must be clearer in terms of who is eligible, the detail of what support is being offered regardless of who the programme is aimed at, be more easily accessible, and be sufficiently flexible to ensure partners can make use of the support despite their busy lives in order to help individuals make the changes in relation to their alcohol use and lifestyle behaviours. Many (ex-)military supports available to partners appeared to focus on the alcohol use of (ex-)military personnel. Development of military-aware supports for partners with alcohol-related needs is therefore needed.

Finally, it was unclear if identified programmes had been evaluated. This highlights a substantial gap in understanding about robust, effective services within the military sector. Future research should be conducted to better understand which programmes are effective not only for serving personnel and veterans but their family members as well.

Strengths and limitations

LIFE-Q reflects the first qualitative study to explore the alcohol use of the partners of UK military personnel. Using qualitative methods, we were able to better understand how partners' alcohol use and lifestyles were shaped by their social, family and military contexts. The study used a creative multimethod approach, combining diaries and interviews, to achieve an 'on-the-ground' exploration of the cultural environments in which drinking behaviours are situated (44). This can lead to more meaningful policy, and tailored alcohol messaging that resonates with people's perceptions of their drinking.

By gathering data at multiple time points and by using three different methods to describe alcohol use/misuse (AUDIT-C scores, 'real-time' diary accounts, and a narrative interview), we were able to witness how drinking behaviours evolved over time. Although this time period was relatively short, this detailed approach allowed a rounded understanding of influences on alcohol use among those we interviewed and how drinking fluctuated in line with military cycles and transitions, celebrations and stressors. Diary entries enabled us also to personalise interviews, which supported the rapport between the interviewer and participant. Participants described how the diary entries and interview process were useful reflective opportunities for them. Since the majority of the participant group had experiences of relocation and being 'married unaccompanied', our findings may be most transferable to others who similarly have experiences of one or more of extensive, prolonged or repeated experiences of separation, have to move regularly, and/or those who live in more dispersed communities.

A particular limitation of Study 1 was that we were not able to recruit partners from different backgrounds into our interview study, most notably male partners, people of other genders and ethnicities and people from the LGBTQ+ community. Whilst the participant group of the diary study was more diverse, the interview participant group were all women in relationships with male serving personnel - only one partner of an ex-military individual was recruited. Diversity was included within patterns of drinking within our participants, with a third drinking at some level of risk although at the lower end. As only two participants scored as 'high-risk' drinkers (AUDIT-C≥10), our findings are not likely to represent the experiences of individuals who engage in the highest levels of risky drinking. Further research to explore use and influences among those with a higher degree of drinking severity would be beneficial as the drivers, influences, and recommendations for this group may differ.

Pairing primary data collection with a mapping exercise of alcohol supports allowed us to more specifically inform how policies and provisions might be developed to better support alcohol

reduction among military partners. Finally, the mapping exercise was undertaken from a service user perspective, with additional input from stakeholders. It is possible that some services without a web presence are not included but we are confident we identified the majority of services that a military partner could encounter if conducting a similar search. Approaching the mapping exercise from the perspective of a service user enabled us to determine the visibility and accessibility of supports that appeared to be readily available through common search terms. This search highlighted a number of gaps and improvements required in provision.

Conclusion

This study is the first to qualitatively explore alcohol use among the partners of UK (ex-) military personnel in the context of wider lifestyle behaviours, their family lives, and civilian and military structures. Overall, our findings indicated that military partners' drinking is influenced by a range of social, cultural, and health factors, such as social activities, feelings of inclusion, exclusion, or isolation, financial concerns, health problems, work stress, and parenting responsibilities.

While some of these are shared by civilian families, participants expressed balancing everyday pressures with the logistics of military-specific stressors, especially those relating to separation and relocation, and these acted as both barriers and facilitators to drinking. Alcohol use increased when military personnel returned home during times of reunion but drinking also monitored and curbed in cases where heavy drinking was brought into the home. Drinking was, at times, suspended as a result of having dispersed social networks due to the number of relocations, but was 'saved up' for reunions with family and friends or increased during times of stress and loneliness.

While a range of services and programmes exist that are available for military partners, findings suggest an urgent need for ensuring such supports have an awareness of the military-specific pressures that military partners may be enduring, and clearer detail in relation to the support on offer, the programmes' focus and content, eligibility and how it can be accessed.

Recommendations

Recommendations have been developed in partnership with stakeholders from the Armed Forces community, including service providers, military family charities, and policy makers. They provide important evidence for the UK Armed Forces Families Strategy 2022-32[4] and may help to inform actions to deliver this strategy. Recommendations are directed toward a range of stakeholders – these should not be seen as siloes of work but rather areas that should be addressed in partnership with those working across research, policy, and practice to improve the lifestyle outcomes for military partners and families.

Public health messaging and service provision

1. Public health messaging should draw on incentives other than health to motivate alcohol reductions among military partners. Messaging could also focus on more relatable and clear information on what level of drinking may constitute risks.

The present research found that some people may be unknowingly drinking at some level of risk. Campaigns may be useful for raising awareness around types of risky drinking that look different to the stereotypical images of heavy binge-drinking in night clubs or extreme addiction. Public health messaging could also draw upon other lifestyle factors which appeared to motivate participants in the current research to reduce their alcohol intake; such as saving money, improving sleep, avoiding the consumption of empty calories and improving energy levels.

2. Alcohol supports aimed at (ex-)military individuals should consider expanding their eligibility to include family members.

Our scoping review found most alcohol supports for the families of (ex-)military personnel revolved around supporting them with (ex-)military personnel's alcohol use or were unclear about eligibility for partners. Partners may benefit from being able to access such supports for their own alcohol behavioural needs, particularly if those supports are cognisant of the types of military pressures and experiences affecting military families. This could be achieved by widening the eligibility of existing support services to include partners, and educating services on the distinctive features of military life that can affect family members.

3. Digital and remote supports (such as online programmes and mobile apps) may provide a reasonable long-term strategy for supporting partners with their drinking and other lifestyle behaviours.

Military partners drinking at lower, yet still risky levels may benefit from discreet, flexible interventions that can be delivered remotely and anonymously and can be accessed in a way that fits with their own time capacities. Remote and digital support may also enable a continuity of support across periods of transition, such as relocation, or when leaving the Armed Forces community.

4. Programmes allowing individuals to track their drinking behaviours may improve awareness of less healthy habits and could be designed to include other lifestyle behaviours.

Participants found diaries and interviews to be useful reflective opportunities, which suggests a readiness for diarising/logging behaviours. Apps such as DrinksRation may help individuals to track fluctuations in their drinking to build a more accurate picture of their drinking over time. The incorporation of reminders and notifications may benefit groups who are particularly busy and who may benefit from the motivational messaging. Based on our findings that participants were not incentivised to look for alcohol supports so much as support with other elements of their lifestyles (e.g. eating behaviours and exercising), we suggest the development of programmes that can incorporate a range of lifestyle behaviours in addition to alcohol use.

5. Programmes that address behaviours within the family system could help identify moments that family members may be more prone to stress and require more support.

Programmes that address families' lifestyle behaviours could have wide-reaching benefits. This approach would allow for the identification of key points at which families encounter transition events that increase periods of stress or vulnerability (e.g. military-related separation and reunions). Such an approach would also take into account the mutual influence family members' lifestyles behaviours have upon one another (e.g. syncing up or offsetting each other's drinking and eating behaviours as seen in Study 1).

6. Alcohol supports should be evaluated to determine their effectiveness and acceptability.

From Study 2, it was unclear as to the extent to which the identified alcohol supports had been evaluated and how adaptations to general behavioural models of change and recovery had been modified to suit (ex-)military populations. More could be done to ensure programmes are appropriately evaluated and to understand the efficacy and acceptability of interventions being delivered in this space.

Funders and researchers

7. Research is needed that explores lifestyle behaviours amongst a broader range of partners.

While attempts were made to recruit a diverse sample, participants were largely white women married to male military personnel. Future studies should consider ways of engaging people of other genders, other ethnicities and the LGBTQ+ community, in order to explore the specific experiences and influences upon their alcohol use and other lifestyle behaviours.

8. Research is required to investigate the eating behaviours of military partners.

Eating behaviours, such as restrictive and binge-eating, emerged as a prominent issue among many partners we interviewed. These behaviours were often more of a concern to participants than their alcohol use. Findings indicated that the stress, loneliness and boredom of military-related separation led at times to under- and over-eating. Further exploration into understanding this population's eating behaviours would be beneficial in order to develop programmes or campaigns that may support partners in managing their eating in response to the variety of stressors and uncertainties associated with military life.

9. Further research should focus on the relationship between stress and alcohol use in military partners and the experiences of those with higher levels of drinking.

Within the present research, we did not capture the experiences of partners with the highest levels of risky drinking; however, findings did include escalations in drinking in response to various military-related stressors and challenges. Further work is needed to determine how best to aid and support partners to cope with such matters, and to identify the specific influences and facilitators of behavioural change amongst those military partners who may have more severe use.

Statutory services

10. The MoD's UK Armed Forces Families Strategy should incorporate an equivalent to the 'Lifestyle' health priority which is outlined in The Defence People Health and Wellbeing Strategy 2022-27.

The Defence People Health and Wellbeing Strategy 2022-27 (7) recognises 'Lifestyles' as a health priority (including smoking, alcohol use, gambling and eating). Lifestyle behaviours are not explicitly mentioned in the current Families Strategy but their inclusion would help to specify how the MoD will meet its commitments to support and improve the wellbeing and quality of life of family members.

More broadly, the current project identified numerous logistical challenges that military partners reported as influencing their alcohol use and its drivers (e.g. stress and mental health issues). Most significantly, participants described the challenges of parenting responsibilities whilst military personnel were posted away or deployed. Reviewing the current provisions and supports that military partners can access, including the possibility for increasing levels of childcare during these key periods, could be beneficial. This is relevant to both the wider Defence People Health and Wellbeing Strategy and the Families Strategy given that serving personnel and their partners play an influential role in one another's lifestyles and health and wellbeing outcomes.

11. Developing educational programmes for healthcare professionals to raise awareness of the issues affecting military families.

The 'veteran-friendly accreditation scheme'[6] equips GP surgeries with specialist knowledge to better support ex-military personnel. A similar UK-wide scheme to train primary health care workers about the additional needs of military families who access civilian healthcare would be valuable, given the findings of this project. GP surgeries are on the 'front line' in providing advice and witnessing the impacts of lifestyle choices and behaviours. Partners may also attend GP practices for their children routinely, therefore GPs may be able to signpost and tailor current interventions to partners' military-specific needs.

Appendix

Table 3. List of programmes identified within Study 2's mapping exercise

General population programmes (N=32)	Military/veteran programmes (N=6)	Veterans only programmes (N=5)	Military families programmes (N=3)	Civilian families programmes(N=4)
• Alcohol Change UK • Dan 24/7 • Talk to Frank • Know the Score • Drugs and Alcohol NI (DACT teams) • Drinkaware • MIND • Change Grow Live • **DrugFAM** • Guy's & St Thomas's GSST • Alcoholics Anonymous • **We are with you** • Scottish Families Affected By Drugs And Alcohol (SFAD) • London friend • Turning point • Changing Lives • Forward Trust • **Humankind** • Phoenix Futures • Kaleidoscope • Barod • **Adferiad** • Soberistas • Club Soda • **UK SMART recovery** • NHS • AA 12 steps (app) • Drinks Meter (app) • Sober Grid (app) • Happify (app) • SAM (app) • Try Dry (alcohol change UK app)	• **SMART MILITARY** • DrinksRation (app) • DrugFAM • **VetChange** • Forces Alcohol and Gambling Support service (FLAGS) • Forces Family Support	• **We are with you** • **SMART veterans programme** • **Combat Stress Substance Misuse support** • **VetChange** • **Adferiad**	• **Combat Stress Substance Misuse support** • **AdFam** • **Forces Family Support**	• Family Anon • Al-Anon Family Groups • National Association for Children of Alcoholics (NACOA) • **AdFam**

Organisations in **bold** *appear in more than more category.*

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