

**The meaning of the military identity: A grounded theory study exploring body image
and physical exercise in male military veterans**

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Abstract

Whilst difficulties faced by military veterans in the transition to civilian life include the loss of the military identity, low social support and health problems, help-seeking behaviours are typically lower in males, potentially due to stigma and masculinity ideologies reinforcing the need to be “emotionally tough”. The body is often constructed as a shaper of identity, with physical exercise described as a way for men to achieve culturally defined exemplars of masculinity. Considering the physicality of the military and similarities between the patriarchal, hierarchical, competitive nature of sports, along with the dearth of literature exploring body image in military veterans, a systematic review was conducted exploring how male athletes report and experience body image related concerns and dissatisfaction. Narrative synthesis of 23 studies found that body image was expressed across five themes, under two overarching cultural discourses: the sport identity and the masculine identity. The current study therefore aimed to explore the purpose of physical exercise participation for male military veterans, with consideration of body image and masculinity ideologies. The study took a constructivist grounded theory approach to data collection and analysis of semi-structured interviews with 18 male military veterans in the UK. Findings comprised a theory stipulating three earlier formative conditions (experiences prompting enlistment, body awareness, and elevated pressure) that influenced the degree to which veterans embodied the military-masculine identity and subsequent transition process in the context of body image and masculinity, with varying reasons for exercise participation throughout. Results are situated in the literature with reference to relevant frameworks concerned with transitions, body image, and masculinity. Despite methodological limitations, the study contributes to the field by highlighting the reframing of masculinity dialogue to support help-seeking behaviours, peer support, facilitating conversations in narrative environments, exercise programmes, processes to ease transition, and awareness of language and terminology in policy.

Keywords: male military veterans, physical exercise, body image, masculinity

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Introduction

Chapter overview

The introduction chapter is comprised of a background to the research, focusing on description of the armed forces and further discussion of the military veteran population. The military identity and culture are then explored, followed by consideration of the research surrounding the military-to-civilian transition and relevant frameworks. Literature around the physical body and identity narratives follows, describing theories of male body image in terms of applicability to veterans. This precedes the aims of the study and subsequent section of a systematic literature review.

The armed forces

In the United Kingdom (UK), three services comprise the British armed forces: the British Army, the Royal Air Force, and the Royal Navy. Responsible for the safety and security of the UK and its dependent territories, the armed forces involve combat, peacekeeping, and humanitarian aid, which can include supporting the police, assistance in the event of a large-scale emergency, and specialist capabilities including bomb disposal and intelligence expertise. Often deployed around the world on different operational duties, the armed forces possess specialist experience and abilities to aid a multitude of problems. Although the UK armed forces have had no active military conflicts since the withdrawal of soldiers from Afghanistan in 2014 (UK Parliament, 2014), the history of conflict for over 100 years has left many soldiers both physically and psychologically injured (Williamson et al., 2019). Recent statistics show that in the past year, 12,440 people joined the UK armed forces, with 15,070 people leaving (Ministry of Defence [MoD], 2024).

Military veterans

In the UK, a *military veteran* is defined as someone who has served in the armed forces for at least one day (Office for Veterans Affairs, 2020). Constructs and definitions however vary amongst other countries, with aspects such as the nation's history, civilian-military relations, and force structure determining who is acknowledged as a veteran (Dandeker et al., 2006). In the United States, the length of service to qualify being a veteran if they joined after 1980 is having two years serving on active and honourable duty (US Department of Veterans Affairs, 2019). Such a spectrum of definitions is associated with both advantages and drawbacks; whilst inclusive definitions allow the newer members of the armed forces community to fit within the broader veteran community, those that have been dishonourably discharged or not completed basic combat training may diminish the contributions or status of other serving members (Truusa & Castro, 2019). Determining veteran status is of utmost importance considering that it can determine eligibility for support such as benefits and housing (Burdett et al., 2013). Further discussion concerning the nuances of the veteran label lies in the Methods chapter in terms of applicability to the current research.

Clinical context

The Veterans Transition Review (Ashcroft, 2014) highlights the need to support veterans in the UK from the perspective of meeting obligations to individuals and promoting the core functions of the armed forces, with the Armed Forces Covenant (MoD, 2022) putting forward a legal duty to support personnel, families, and veterans. Due to the high physical training demands of military life, it has been estimated that approximately 60% of military discharges result from musculoskeletal injuries (Williamson et al., 2019), with 10,100 service personnel and veterans receiving injury, wounds and scarring-related compensation between 2005-2020 (MoD, 2020). Post-traumatic stress disorder (PTSD) is also a commonly developed condition (Fulton et al., 2015), increasing the likelihood of developing other

disorders such as depression and anxiety disorders by 80% (American Psychiatric Association [APA], 2013). Although research has shown that most people do not experience difficulties during the military-to-civilian transition (Elinitzky et al., 2017), challenges with the transition period may be higher amongst veterans with a lower health status (Lee et al., 2020). Veterans experiencing mental health difficulties are less likely to seek support, often not presenting to mental health services until approximately 13 years after completion of service (Murphy & Busuttil, 2019). Aside from accessibility questioned in that the gateway to healthcare is civilian-centric (Browne et al., 2007), other deterrents to help-seeking include stigma and the need to be “emotionally tough” (Jakupcak et al., 2014), ramifications of speaking about their time in service (Hunt & Robbins, 2001), and isolation from friends, family and support systems (Crowe et al., 2018). It is also important to consider that 86.4% of veterans are male (Office for National Statistics [ONS], 2023), who tend to find it more difficult to approach or engage with services in response to difficulties such as depression (Emslie et al., 2006). This is often attributed to the traditional ideas of masculinity as being stoic, strong, self-reliant, and in control; all of which are likely to be amplified in the armed forces population (Staiger et al., 2020). For these reasons, it is of utmost clinical importance to develop public policy, clinical practice, and research to support service personnel and veterans in making successful transitions into civilian life.

Military culture

The term *culture* refers to the learned, group phenomenon of a collection of representations, texts, and practices that give meaning to someone’s environment (Raud, 2013). The constitution of the armed forces is defined by hierarchical structures, rules and regulations, adherence to orders, and unique values such as subordination to the wider group and self-discipline (Keeling, 2018). Salaries, housing, food, recreation, clothing, and healthcare are provided (Ashcroft, 2016), and unique terminology, including military

acronyms, slang, and humour are specific to the military culture and are generally not understood by civilians (Curry et al., 2017). Along with the provision of training and identifying uniform, intensive expectations prevail; idiosyncratic shifts whilst on active duty, living on site (often with partners and children), and travelling far afield on short notice (Druckman et al., 1997). The military identity has therefore been described as a social identity in recognising a new group membership, internalising its values and norms, viewing themselves as members of this group, and engaging in comparison to other groups (Tajfel & Turner, 1978). Although subcultures within the larger military culture exist, such as heterogeneity between services, units, and regiments, along with differences relating to gender, religion, ethnicity, and ranking (Winslow, 2000), the “specific occupational culture” (Soeters et al., 2006b, p.237) of the military is very much removed from civilian life and reinforces separation from society, even in the absence of deployments (Hall, 2011).

The military identity

In such an all-consuming, hierarchical institution, the “subordination of individuality and self-determination” (Woodward & Jenkins, 2011, p.253) often results in the formation of a military identity, with the need to adapt to military-like cognitions and behaviours so that the roles of fighting and protecting can be undertaken, with the cultural legacy of camaraderie also developed (Bergman et al., 2014). In the UK, basic training for new recruits enables a forced separation from civilian life to identify with the military organisation and culture (Godfrey et al., 2012), involving being “grounded in a strict code of discipline to which new recruits must be quickly accustomed” (Cooper et al., 2018, p.4). This could be likened to the *total institution* concept by Goffman (1976), which stipulates that the individual becomes completely enmeshed into the shared identity and subsequent separation from the civilian world. Basic training has thus been defined as a “transformative act” where the identities taken on by personnel are inherent in their military capabilities, providing symbolic value and

a degree of social status (Woodward & Jenkins, 2011). Although individual military identities are nuanced, individual, subtle, and often deeply personal, Woodward and Jenkins (2011) describe how the conceptualisation of military identities appear grounded in the performative components of military activity, camaraderie, and the participation in significant events nationally or worldwide. Such identity carries implications for individuals' self-concept in both military life and during the transition into civilian society (Higate, 2003).

Military masculinities

Military masculinity is a sociological concept referring to the “particular set of gendered attributes typically found within the institution of the Armed Forces” (Higate, 2003, p.29). Rather than being a simple, fixed personality trait, masculinity is a fluid and contextual process, cultivated and sustained within the social environment (Messerschmidt, 2018).

Hegemonic masculinity, as coined by Connell (1995), is a dominant notion of gender identity referring to the presentation of overly male attributes, practices, and identities. Such gendered ideology and notions around being physically and mentally tough, along with stoicism, self-reliance, and aggressiveness, remain a prevalent component of military culture (Bulmer, 2013). Atherton (2009) additionally found that a “hard-bodied form of masculinism” (p.824) underpinned the rigid system of embodied routines and training, and was the crux around which other identity formations revolved. The networks, community and friendships formed “permeate an otherwise hierarchical structure” (Atherton, 2009, p.825), with personnel embodying a warrior-like ideal, and physical exertion and lack of sleep-induced fatigue reinforcing such a stereotype (Do & Samuels, 2021).

There are contradictions within such stereotypical military masculinities in veterans, as some “triumphant and heroic representations of veterans sit alongside representations of mental illness, alcoholism, homelessness, and destitution” (Bulmer & Eichler, 2017, p.168);

for example, in media depictions of veterans with PTSD (Rhidenour et al., 2019). However, emotional expression or suggestions that one is in need is generally discouraged by such gender ideology (Dunscombe & Marsden, 1993), with the dependence and helplessness often associated with injury, along with subsequent disability, antithetical to the powerful and autonomous connotations of masculinity (Shuttleworth et al., 2012). However, reliance on the generalised categories found in dominant versions of masculinity can limit the extent to which veterans feel able to discuss past experiences, rather than accounting for the individual, nuanced, and fluid reality of both masculinity and disability (Evans et al., 2020). Such interpretations of masculinity as being problematic or needing to be “fixed” in veterans can also result in reluctance to seek support and turning to alcohol instead (Hitch et al., 2023). Other research has suggested masculinity to be used as a resource considering its construction in accordance with values cultivated during military service (Caddick et al., 2015a).

Additionally, some researchers have argued that biased focus on military masculinities has meant less attention being paid to veteran masculinities in the military-to-civilian transition (Bulmer & Eichler, 2017). This is important considering the need to actively construct another identity, rather than relinquishing and “undoing” militarised masculinity (Enloe, 2000). It is essential to remain cognisant of the finding that militarised masculinity is an experience, a practice, and an embodiment (Bulmer & Jackson, 2018), and that the transition to civilian life involves reconstruction of masculine norms (Bulmer & Eichler, 2017). Military masculinities should therefore be regarded as nuanced and complex, considering that “men can dodge among multiple meanings according to their interactional needs” (Connell & Messerschmidt, 2005, p.841).

Transition to civilian life

Reasons for leaving the armed forces span approaching the end of service contract, medical discharge, planned retirement, the experience of injury and mental health conditions, and background factors such as childhood adversity (Burdett et al., 2020). The term *transition* has been defined as “the idea of a passage, from one state to another, from one position to another, a passage that takes place gradually, progressively, with something happening in the middle” (Blackburn, 2017, p.63). As the military culture tends to occupy less tolerance for ambiguity and be more collective with distinguished societal order and hierarchy (Hofstede et al., 2010), transitioning into a highly individualistic, unpredictable and changing civilian society often presents readjustment challenges (Soeters et al., 2006a). Considering the time spent away from civilian society, the transition involves changes in relationships, assumptions about the world, work contexts, and identity in both a personal and social sense (Kintzle & Castro, 2018). For many, joining the highly structured, controlled environment of the military occurs alongside transitioning to adulthood, meaning lowered development of life skills (Shields, 2020), with personnel returning to civilian culture often presented with a “reverse culture shock” where they likely had not gained competence or capital as adults (Bergman et al., 2014). Such assimilation and immersion in military culture can lead to feelings of alienation, with veterans consequently described as “newcomers in their own country” (Truusa & Castro, 2019, p.15).

Leaving behind the military social group and losing purpose and meaning can result in an identity crisis (Walker et al., 2020), exacerbated by the observation that personnel are not taught to “un-train” or “un-soldier” in the same way as during basic training (Smith & True, 2014). As an interviewee in the Robinson et al. (2017, p.19) study explained, “they spent 13 weeks turning me into a Marine, but only 3 days turning me back into a civilian”. The health and social problems resulting from both military inculcation and the transitional re-entry into the civilian world undermine masculine ideals and cause difficulty in living up

to “prevailing notions of masculinity that hinge on a man’s success in the economy” (Bulmer & Eichler, 2017, p.168). Such profound losses of identity experienced in veterans (Binks & Cambridge, 2018) are also likely heightened in those with injury or illness due to further biographical disruption (Bury, 1982) according to the social psychology of illness, where chronic illness challenges assumptions about lives, the world, and their place in the world, resulting in a “loss of self” (Charmaz, 1983, p.168). This relates to the Model of Adult Transitions (MoAT; Schlossberg, 1981; Schlossberg et al., 1995), with a transition occurring if “an event or non-event results in a change in assumptions about oneself and the world and thus requires a corresponding change in one’s behaviour and relationships” (Schlossberg, 1981, p.5). This has since been suggested to be heightened in service personnel due to the military identity being a core aspect of the self and its all-encompassing nature (Schlossberg, 2011). Whether the transition is anticipated or unanticipated, along with variation in personal and demographic characteristics, support systems, and coping mechanisms, can all enable or deter the ability to manage a successful transition (Anderson & Goodman, 2014). Unanticipated triggers in the military may comprise injury, medical problems, or failure to be promoted, which are typically associated with worse outcomes than anticipated triggers (Kleykamp et al., 2021).

Military Transition Theory (MTT; Castro et al., 2014; Kintzle & Castro, 2018) uses the insights of the MoAT to explain a successful transition as a function of several factors, including employment, health status, family support, and stable housing. Considering that the transition involves the loss of pivotal factors such as housing, food, medical care, and income, having unmet discharge needs alongside the loss of the military identity can increase the likelihood of someone struggling (Markowitz et al., 2023). However, MTT has been criticised for being US-centric (Blackburn, 2016), which also calls into question applicability to the UK armed forces considering key differences in experiences and transition policies

(Finlan, 2013). Emerging in the UK, the Bourdieusian-informed Model of Transition in Veterans (MoTiVe; Cooper et al., 2017) illustrates the monitoring of individual trajectories through the three interrelated concepts of the habitus, capital, and field. The military habitus is firstly constructed during basic training where recruits assimilate into the masculine military culture, further away from civilian society. Combat creates an embodied legacy with a lifelong, enduring effect on the habitus, with the subordination to rank and symbolism of uniform having cultural capital in the military but not translated into civilian society (Cooper et al., 2018). As firstly stipulated by Bourdieu (1989), those who achieve cultural competence by “mobilis[ing] capital into accepted civilian norms” will generally have a smoother transition (Cooper et al., 2017, p.54).

The physical self and body

In reference to the earlier described loss of self in transition, Charmaz (1983) depicts the changing relationships between the body and the self as fringed with loss and uncertainty. This occurs in parallel with the transition process, meaning dissociation between the body and the self, both previously embodied as military (Grimell & van den Berg, 2020). The role of the body in life post-service therefore could be speculated, given research highlighting the body as a visible way of expressing identity as a social entity (Neagu, 2015). For example, the damage of war can be conveyed visually by veterans with amputations, with “wounds [being] the striking embodied foundation of their war stories” (Caddick, 2021, p.161). Considering that having a physically able, strong, capable, and muscular body is a non-negotiable requirement of the military (Godfrey et al., 2012), this may directly contrast with the experience of injuries, where they not only represent a loss of the “military body” (Keeling & Sharratt, 2023) but are also often a reason for medical discharge and termination of the military career; overall, loss of the military identity (Keeling, 2018). Many veterans additionally experience frustration, confusion and difficulties with psychosocial integration in

the shift from being able-bodied to disabled (Brunger et al., 2013). Use of physical exercise may also be a way of regaining control in a civilian world fringed with uncertainty and ambiguity, considering suggestions from Beck (1992) and Shilling (1993) that depict the body as a way of maintaining security in a “global system characterised by multiple and inescapable risks” (Shilling, 1993, p.5).

Body image in men

Body image is a multifaceted construct representing an individual’s “subjective sense of their body, focusing primarily, though not exclusively, on appearance and encompasses behavioural, perceptual, cognitive, and affective phenomena” (Weaver et al., 2014, p.1067). It is often researched alongside disordered eating behaviour and as such, revolves around adolescent girls and women (Grieve, 2007), with research prioritising female samples and measurements capturing the female experience of body image (Quittkat et al., 2019). The growing body image concern amongst men has been attributed to the “resurgence of male body imagery within popular culture” (Wienke, 1998, p.256), alongside products designed to enhance appearance, including exercise equipment and dietary supplements (Shilling, 1993). Whilst body image in men has had less prominence in the literature, research generally points towards the drive for muscularity and representation of the “mesomorphic ideal” promoted by Western media (Pope et al., 2000). Such an ideal is thought to be symbolic of having a formidable masculine presence in the world, conveying physical strength, power, control, and accomplishment (Klein, 1993); above all, the hegemonic masculinity ideologies proposed by Connell (1987). Perceptions of not meeting such an ideal have been associated with body dissatisfaction, including the more recent classification of muscle dysmorphic disorder (MDD), characterised by preoccupation with perceived insufficient muscularity and desire to achieve the muscular ideal (APA, 2013).

Body image in military veterans

Whilst body image is often problematised and medicalised within eating disorders (McLean & Paxton, 2019), the social construction of masculinity within Western culture has been proposed to underpin body image in men (Tylka, 2021). Muscle has a crucial role in shaping masculine identity; historically linked to men's bodies being the product of manual labour demanding a degree of physicality (Connell, 1983). Gerschick and Miller (1994) described three predominant strategies employed by physically disabled men in response to their disability and the demands of hegemonic masculinity. This included reliance (striving to meet masculinity cultural ideals more strenuously), reformulation (adjusting masculinity standards to coordinate with their own abilities), and rejection (rejecting or viewing the dominant masculine model as insignificant and constructing an alternative masculine identity). According to Connell (1995), those adopting the reliance strategy were hypothesised to constitute working-class men, who typically endure work requiring strength, stamina, and toughness, necessitating a physically powerful body. This links to the social context of the military, a prime arena for physically demanding work and thus possession of a physically capable body (Keeling, 2018).

As described by Bourdieu (1984) and relating to the earlier discussed MoTiVe (Cooper et al., 2017), the male body is also a form of capital, particularly for working class men, against middle or upper-class men possibly seen otherwise as both an intellectual and social threat. Non-military men may have “access to other compensatory resources (besides the body) from which to build a hegemonic masculine self-identity” (Wienke, 1998, p.266), suggesting that those in the military exaggerate traditional male standards for the purpose of both symbolic validation of masculinity and re-establishment of traditional sexual roles, according to the later discussed gender role endorsement theory (O'Neil, 1981). Considering that hegemonic masculinity is “naturalised in the form of the hero and presented through

forms that revolve around heroes” (Donaldson, 1993, p.646), the military could be hypothesised a prime example of this due to the heroic connotations associated with being a soldier (Ashcroft, 2014). Military veterans injured or otherwise physically compromised may be more likely to depend on the reformulation strategy (Gerschick and Miller, 1994), with the ageing process also resulting in older men valuing internal functioning rather than external appearance, with greater concern about bodies degenerating (Drummond, 2009). Wienke (1998) asserted the three categories as operating along a continuum, depending on social conditions. This corresponds with masculinity being a process or an ongoing accomplishment, rather than fixed or static (Connell, 1995).

Body image difficulties in military veterans

Specific features of military life may increase the risk of developing body image difficulties or eating pathology, including regimented lifestyles, strict physical fitness requirements, weigh-ins and weight regulations, deployments, being exposed to or witnessing violence, and changes in eating behaviour whilst in service (Bodell et al., 2014). Such aspects of military culture have also been found to influence weight perception in service personnel differently than in civilian populations, particularly in military men (Clark et al., 2017). Those with a history or more vulnerable to developing body image difficulties may also feel more drawn to a military career due to the emphasis on physicality and physical training (Bartlett & Mitchell, 2015), with eating disorder pathology rising in the US military as a consequence of the need to *make weight* (Bodell et al., 2014), defined as “meeting a pre-established weight cutoff for qualification purposes” (Masheb et al., 2019, p.1064). Body image concerns were found to be elevated for veterans with appearance-altering injuries (Keeling et al., 2021); particularly in those with scarring and limb loss ascertained in combat deployments (Clasper & Ramasamy, 2013). Injuries may also act as reminders of the event, having an ensuing effect on trauma symptomology (Weaver et al., 2014), along with

connection to internalisation of societal ideals and feeling emasculated (Ellis, 2016). In general however, there is a dearth of literature on body image in male military populations (Keeling et al., 2021); perhaps assumptions prevail regarding applicability to a traditionally male group (Higate, 2003). For this reason, three models centred on explaining body image in men are described in terms of potential application to the veteran population.

Tripartite influence model. Originally proposed by Thompson et al. (1999) and later developed to represent males' body image more accurately (Tylka et al., 2011), the tripartite influence model explains how social influences, internalisation of the societal ideal, and appearance comparison all impact body dissatisfaction. Use of constructs relevant to men (Karazsia & Crowther, 2010) have suggested that internalisation of the mesomorphic ideal results in higher muscularity dissatisfaction and body fat dissatisfaction (Tylka et al., 2005). This could be applied to veterans in the sense that pressures from society or other influences about the appearance of the "ideal soldier" (Keeling & Sharratt, 2023) or the "ideal man" (Leit et al., 2001) may result in veterans viewing post-military changes in their appearance as departures from the masculine societal ideal, particularly considering the reduced physical training or appearance-related changes associated with an injury (Hoffman et al., 2015).

Objectification theory. Also originating from theorising body image in women, objectification theory discusses the sexual objectification of women in the media and interpersonal encounters, which suggests perception from an "observer's perspective", encouraging greater focus on external appearance and eventual psychological distress (Fredrickson & Roberts, 1997). Research has primarily supported this in gay men (Martins et al., 2007) due to stigma and internalised homophobia linked to body dissatisfaction (Kimmel & Mahalik, 2005). Higher body shame has been found in men reporting higher sexual objectification (Davids et al., 2019), with bodybuilding suggested to represent a subculture fostering objectification due to heightened focus on appearance, resulting in a higher drive for

muscularity (Hallsworth et al., 2005). Military veterans have been thought to be objectified societally through cultural discourses portraying their “hero role” and therefore “stripped of agency and muted” (Young, 2017, p.69). Through the separation of the veteran within another culture, attempts to understand them exist without necessarily engaging with them (Barker et al., 2022), along with the objectification and abstraction of the body in war (Bulmer & Jackson, 2016), potentially suggesting some inclination for veterans to change their body to satisfy such societal and cultural discourses.

Gender role endorsement. This encompasses the behaviours and expectations defined by society as masculine, embodied in the behaviour of the individual man (O’Neil, 1981). The mesomorphic ideal and drive for muscularity is thought to epitomise masculinity and endorse the traditional notions and cultural expectations of men to be strong, powerful, and dominant (Tylka, 2021), with gender role endorsement found to be related to body shame (Davids et al., 2019). The threatened masculinity hypothesis postulates that increasing gender equality during the late twentieth century resulted in men with “fewer domains in which to assert their ascendancy over women” (Hunt et al., 2013, p.290), leading to an identity crisis and a compensatory desire to display masculinity through the muscular body (Mills & D’Alfonso, 2007). Identity crises have been discussed previously in the context of the military-to-civilian transition (Truusa & Castro, 2019), so it may be speculated that veterans having lost their military status resort to muscularity-building behaviours to resolve such a crisis. Given the synonymy of the military with masculinity (Morgan, 1994), veterans may also feel that in losing their military status, they have lost one aspect of what makes them a man, exacerbated in the presence of injuries or other acquired disabilities (Weaver et al., 2014), possibly suggesting some desire to compensate for this.

Sport and physical exercise participation

Physical exercise has thus been described as a way for men to achieve culturally defined exemplars of masculinity (Wienke, 1998). Sports are often permeated with notions of gender exclusivity and masculinity, with the “socialisation through sport conscientiously understood to be masculinising” (Kidd, 2013, p.555), particularly considering the historical discouragement of females from participating (Bell, 2007). This has been echoed by Connell (1995), who suggested the sporting prowess of men to be “symbolic proof of superiority and right to rule” (p.54). The patriarchal nature of sports (Kidd, 2013) along with displays of strength and violence, encouraging competition and hierarchy (Pronger, 1990) have similarities to the military population, along with recognition by uniform and playing “against” a team (Havenetidis et al., 2023). Having a physically capable body is deemed a significant facet of the military identity (Hinojosa, 2010), with physical training a substantial part of military life (Robinson et al., 2016).

Sport has also been consistently documented in life post-service; Evans et al. (2020) discussed the role of sport participation in constructions of regimes relating to masculinity and identity in Danish veterans with injury. Veterans perceived their wounds as markers of lost masculine capabilities during their military service, but sport participation an opportunity for re-establishing a sense of self in new forms of masculine expression and familiarity amongst other veterans, in what was overall “valued as a source of mutual support and empathy, and existed in places and spaces where familiar forms of hegemonic or hyper-masculine regimes could be reproduced” (Evans et al., 2020, p.712). Similarly, sport has been used as a tool for disabled veterans in the US to refashion their lives and identities (Messinger, 2013). Reviews have echoed this (Caddick & Smith, 2014; Walker et al., 2020; Whitworth & Ciccolo, 2016), with outcome measures spanning symptom reduction of PTSD, improved depression, anxiety and quality of life, increased activity engagement, social wellbeing, and sleep quality. Qualitative research has also reiterated the value of therapeutic

recreation, focusing on specific sports activities such as surfing (Caddick et al., 2015b), river running (Dustin et al., 2011), fly fishing (Mowatt & Bennett, 2011), and aerobic exercise (Otter & Currie, 2014).

Given the above discussions of body image, it is unclear whether physical exercise in post-military life serves the function of maintaining any outward appearance deemed ideal by masculinity ideologies; research has centred around other facets, mostly symptom reduction of PTSD (LeardMann et al., 2011) and quality of life enhancement (McDonagh et al., 2024). Given the above research on the physical self and body narratives (Shilling, 1993), along with the association between body image and hegemonic masculinity (Drummond, 2009; Wienke, 1998), exercise may also be a method of maintaining the military body or regaining perceived loss of masculinity having left the military. Exercise may also be one area of their life over which they have control in the otherwise unpredictable, scary world comprising civilian society (Beck, 1992).

Research aims of the current study

Prior to the empirical element of the study, several areas were considered for a systematic review of the literature. Due to the lack of research concerning body image in both male and female serving and ex-serving personnel, other constructs such as transition experiences, help-seeking behaviour, and exercise participation in veterans were considered; however, recent reviews exist (Randles & Finnegan, 2022; Sachdev & Dixit, 2024; Walker et al., 2020), and the researcher wished to remain on the topic of masculinity and the physical body. Given the above discussions of masculinity within sport and the similarities of sport to the military (Pihlainen et al., 2023), it felt appropriate therefore to conduct the review on male athletes' experience of body image, producing potential extrapolations to the male military veteran population.

Considering how injury unsettles masculinity, the empirical element of the study then aimed to investigate the mechanisms underlying physical exercise participation for male veterans, with focus on the concepts previously elucidated of body image and masculinity. The research questions were therefore as follows: What is the purpose of physical exercise for male military veterans in the UK with an injury or mental health difficulty? What is the role of body image in physical exercise participation and how do masculinity ideologies come into play?

Systematic literature review

Chapter overview

Given the lack of research on body image in male military veterans, this chapter presents a mixed methods systematic review on the reporting and experience of body image related concerns and body dissatisfaction in male athletes. Key points relating to the research area are firstly summarised, followed by delineation of the methodology, including search terms and study selection. Extensive screening processes yielded 23 papers eligible for the review, which were critically appraised and pooled in a narrative synthesis. The review findings of five themes sitting within two overarching athlete-centred and masculinity discourses are then discussed with reference to relevant literature and application to military veterans, along with clinical implications and recommendations for further research.

Introduction

Historically, body image disturbance has been oriented as a female-specific problem (Cafri et al., 2005), and although earlier research suggested men to be more satisfied with their bodies than women (Cash & Brown, 1989), this has been attributed to skewed body image assessment tools more inclined towards the female experience (Kling et al., 2019). Whilst research has suggested that male body image concerns relate to the drive for muscularity rather than the drive for thinness (Kelley et al., 2010), others have suggested this to be more complex (Hildebrandt et al., 2010). The prevalence of body image concerns among men is particularly highlighted in specific subgroups, with those in leanness-emphasising sports more vulnerable (Olivardia et al., 2004). As outlined by gender role endorsement theory (O'Neil, 1981), male athletes are thought to be representative of the strong, mesomorphic, muscular ideal expected in Western society (Park, 2005). The tripartite influence model (Thompson et al., 1999) may also be applicable in the sense of comparison

to other athletes and societal expectations of what an athlete should look like (Tylka et al., 2011). Therefore, the current review is led by the research question: How do male athletes report and experience body image related concerns and body dissatisfaction?

Methodology

Design

By using rigorous and transparent methods, systematic reviews aim to identify, evaluate, and summarise findings of relevant research studies on a given topic through the unbiased syntheses of studies or evidence (Pollock & Berge, 2018). Historically, the aggregation of findings through meta-analyses of randomised controlled trials were considered the “gold standard” in terms of evidencing effectiveness of certain healthcare phenomena (Stegenga, 2011). However, such approaches rooted in cause-and-effect and objective outcomes have propelled research in the health field to utilise a range of methods in generating and disseminating knowledge for clinical practice, particularly considering that the “diverse origins of problems in healthcare require a diversity of research methodologies” (Pearson, 2010, p.490). For this reason, the emergence of alternative paradigms of knowledge such as qualitative studies, economic designs, and diagnostic accuracy studies have attempted to explore beyond the effectiveness of healthcare, and focus on whether it is feasible, meaningful to patients, and appropriate to a specific culture (Pearson, 2010).

Considering that the research question examined body image difficulties in how they are both quantitatively reported and qualitatively experienced, a mixed-methods systematic review (MMSR) was deemed most appropriate (Petticrew et al., 2013). MMSRs are particularly useful in providing a comprehensive synthesis of the evidence to gather information needed by decision makers in policy implementation and guideline development (Lizarondo et al., 2020). Due to the likelihood of retrieving methodologically diverse studies,

the design and conduct of the current review utilised the Joanna Briggs Institute (JBI) guidance (Lizarondo et al., 2020), recommended for comprehensive, integrative reviews (Kolaski et al., 2023), with results reported in accordance with the Preferred Reporting System for Systematic Reviews and Meta-Analyses (PRISMA; Page et al., 2021). Despite the complexity in conducting a MMSR, the researcher aimed to create a synthesis where the “numerical data inherent in the positivist paradigm [could] combine with the equally important subjective opinions and perspectives presented in the constructivist paradigm” (Stern et al., 2020, p.2109).

Mixed-methods reviews

Three general frameworks were identified by Sandelowski et al. (2006) in the conduct of MMSRs: segregated (requiring two separate syntheses for both forms of data), integrated (combining both forms of data), and contingent (the sequential conduct of two or more syntheses). Separate syntheses pose challenges in that some research is not given as much weight as others; largely quantitative prioritised over qualitative research (Roberts et al., 2002). JBI guidance thus recommend that data be transformed into a mutually compatible format by quantitative data “qualitised”, due to greater accuracy than if numerical values were attributed to qualitative data (Lizarondo et al., 2022). This involved the data from quantitative studies being extracted and translated to textual descriptions to integrate with the qualitative data, from which themes were extracted (Thomas & Harden, 2008). Findings were then pooled to create a narrative synthesis: presentation of words and text to synthesise findings from multiple studies (Popay et al., 2006).

Preliminary search

A preliminary search on existing systematic reviews focusing on the research question was conducted via PROSPERO, on the EBSCOHost database, and on the Cochrane Library, with no prior reviews addressing the topic of the current review.

Search strategy and screening

As aforementioned, the systematic review was conducted in accordance with the PRISMA guidelines (Page et al., 2021) and guided by the JBI methodology for MMSRs (Lizarondo et al., 2020; Stern et al., 2020). To devise accurate and representative search terms able to answer the review question, definitions of the key constructs were fundamental.

Definitions

Body image. Cash (2011) has emphasised the need for researchers to give careful thought as to what they mean by the term body image; along with the earlier definition by Weaver et al. (2014), this is a multifaceted construct encompassing “how people think, feel, and behave with regard to their own physical attributes” (Muth & Cash, 1997, p.1438). The review therefore focused on thoughts, feelings, and behaviours about the body, including body satisfaction or disturbances, along with pathologies such as body dysmorphic disorder (BDD) and MDD (APA, 2013).

Athlete. An *athlete* is defined as “an individual who, by virtue of special training or natural talent, is fit to compete in a physically demanding sport” (Kent, 2006, para.1), as referenced by the Oxford Dictionary of Sports Science and Medicine. Both recreational and elite athletes were included in the review to enable sufficient generalisability and from findings that both classifications of athletes are affected by body image disorders and disturbances (Burgon et al., 2023).

Inclusion and exclusion criteria

The review was guided by the application of clear inclusion and exclusion criteria to the papers retrieved during the screening process (Bettany-Saltikov & McSherry, 2024), both of which were stipulated a priori to the screening process to reduce bias (McDonagh et al., 2013).

Inclusion criteria. Papers had to be in English with adult (over the age of 18) male athlete samples. Papers also had to have a method of measuring participants' feelings about their body, which could either be in quantitative form (e.g., self-report quantifiable measures), qualitative form (e.g., semi-structured interviews), or mixed methods (e.g., questionnaires with additional open-ended responses). For papers that included multiple outcome measures, only the primary body image scales or scales relevant to the review question were extracted. A scale was deemed a "body image scale" if it contained a keyword from the Phenomenon of Interest. This included scales assessing for MDD considering its common manifestation of body image disturbance in males, along with prevalence in male athlete samples (Tod et al., 2016).

Exclusion criteria. Papers were excluded that looked at eating disorders in isolation; whilst eating disorders and body image disturbances are interlinked (APA, 2013), it would be inaccurate to assume that they operate in direct concordance with each other and can be used interchangeably, particularly considering differing manifestation of eating disorders in men (Strother et al., 2012). Papers were also excluded where anabolic steroid use was a focus, considering steroid use is banned in most sports (Bhasin et al., 2021); commonplace primarily in bodybuilding (Mantri et al., 2023). Studies were also excluded that had both male and female participants due to inconsistent methods of comparison, along with studies exploring experiences from second-hand perspectives, such as coaches.

Studies using children or adolescents under the age of 18 were also excluded due to the confounding influence of puberty on both body image and involvement in sports (Burgon et al., 2023), along with studies examining body image in the context of other factors such as disability or sexuality, both due to limited generalisability and the likelihood that these variables would have been prioritised and therefore acted as confounders (Filiault & Drummond, 2008). Reviews were excluded as these required another level of analysis and the few reviews retrieved during the screening process appeared too heterogenous to be able to interpret with accuracy (Sylvester et al., 2013). Grey literature in the form of theses were also excluded due to not being peer reviewed and without the rigorous review process, along with conference papers due to minimal detail and articles without an empirical element. Papers with the primary language not in English were also excluded; although this may have unintentionally introduced bias by discounting certain papers, the time-limited constraints associated with the systematic review meant that it was infeasible to be able to accurately translate such papers.

Search strategy

Seven databases were electronically searched between 6-10 December 2024: CINAHL Ultimate, APA PsycArticles, APA PsycInfo, MEDLINE Ultimate, and SPORTDiscus (via EBSCOHost), along with Web of Science and SCOPUS. Application of the PICO criteria (Population of interest, Phenomenon of interest, Context), endorsed by the JBI guidance as the most effective to capture a broad range of studies (Stern et al., 2020), guided the search terms. Various search terms relating to body image were utilised to most efficiently capture all studies meeting inclusion criteria, which also involved consulting other published reviews exploring body image as a construct (Table 1; Kling et al., 2019). No other limiters were specified to enable as much research to be generated as possible. A further search was conducted via Google Scholar in acknowledgement that database searching will

not be wholly accurate (Siddaway et al., 2019), with citation searching also conducted on the eligible studies following the initial database search.

Table 1

Search terms used in the current review

PICo criterion	Field	Search terms
Population of interest (P)	Topic (title, abstract, keywords)	male* OR m*n AND “athlete*” OR “sport*” OR “sporting level*” OR “aesthetic sport*” OR “nonaesthetic sport*” OR “lean sport*” OR “non-lean sport*” OR “endurance sport*” OR “combat sport*” OR “team sport*” OR “weight* sport*” OR “run*”
Phenomena of interest (I)	Topic (title, abstract, keywords)	“body image” OR “negative body image*” OR “positive body image*” OR “body dissatisfaction” OR “body satisfaction” OR “body ideal*” OR “weight concern*” OR “shape concern*” OR “body esteem” OR “appearance concern*” OR “body image avoidance” OR “appearance anxiet*” OR “appearance-related anxiet*” OR “appearance-related concern*” OR “muscular* satisfaction” OR “muscular* dissatisfaction” OR “body shape satisfaction” OR “body shape dissatisfaction” OR “weight satisfaction” OR “weight dissatisfaction” OR “appearance satisfaction” OR “appearance dissatisfaction” OR “body image satisfaction” OR “body image dissatisfaction” OR “body checking behav*” OR “body shame” OR “appearance comparison*”
Context (Co)	Full text	“questionnaire*” OR “self-report” OR “inventor*” OR “interview*” OR “focus group*” OR “case stud*” OR “qualitative” OR “quantitative” OR “randomised controlled trial*” OR “experiment*”

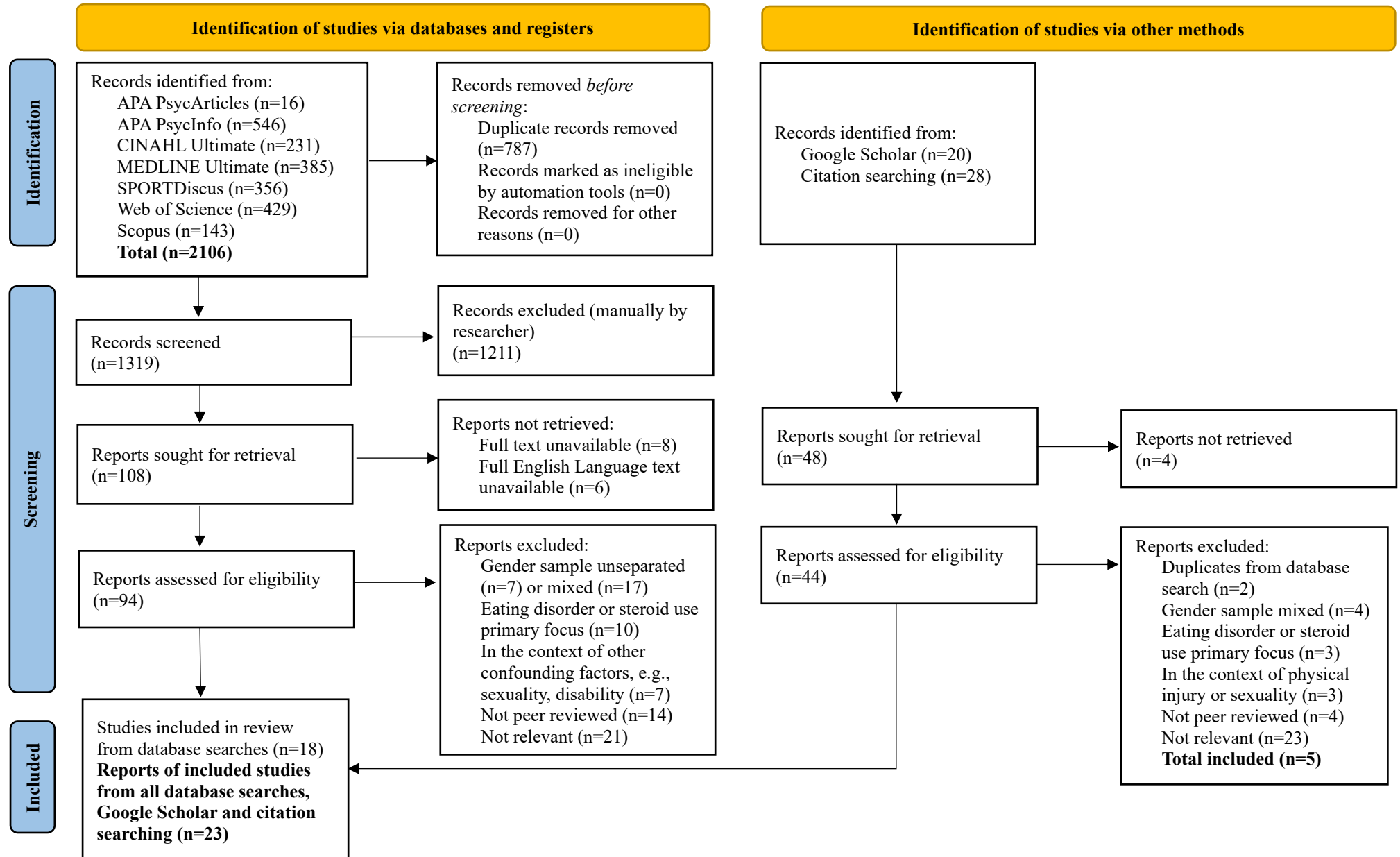
Note. The tabular rows represent separation of the terms using the ‘AND’ function.

Study selection

The search process is illustrated by the PRISMA flow chart in Figure 1. The results returned from the database search were exported into EndNote to conduct initial screening, which involved automatic removal of duplicates. The researcher also manually removed additional duplicates unidentified by the software. The records not meeting inclusion criteria were excluded following scanning of the titles and abstracts, and full texts of the remaining records were retrieved and reviewed. The researcher noted the reasons for exclusion at this stage, with the resulting 18 papers found meeting inclusion criteria for the review (Atkinson, 2011; Blouin & Goldfield, 1995; Cafri et al., 2008; Edwards et al., 2016; Fasczewski et al., 2022; Galli & Reel, 2009; Galli et al., 2015; Galli et al., 2017; Gibson et al., 2019; Goltz et al., 2013; Harmancı & Okray, 2021; Killion & Culpepper, 2017; Nelson & Jette, 2022; Pinto et al., 2020; Satterfield & Stutts, 2021; Stapleton et al., 2016; Steinfeldt et al., 2011; Wesołowska, 2020). The Google Scholar search identified two additional studies (Devrim et al., 2018; Petrie & Moore, 2023) and citation searching yielded three additional studies (Hale et al., 2010; Hallsworth et al., 2005; Pickett et al., 2005), meaning that in total, 23 papers (16 quantitative, three qualitative, and four mixed methods) comprised the review. Appendix A illustrates the study characteristics, including appraisal scores. The screening process was carried out independently by the researcher, with each step clearly detailed to maximise rigour and ensure replicability (Brown et al., 2015).

Figure 1

PRISMA flow diagram for systematic reviews which included searches of databases, registers, and other sources (Page et al., 2021)



Procedure

Assessment of methodological quality

Following PRISMA guidelines, study quality was assessed by the researcher using the Mixed Methods Appraisal Tool version 18 (MMAT; Hong et al., 2018), with demonstrated high efficiency and reliability for appraising the methodological quality of qualitative, quantitative, and mixed methods studies (Hong et al., 2018). Each study was asked two initial screening questions, followed by a set of five tailored questions for the type of study. To reflect the considerations made by Hong et al. (2018) who advised against assigning a numerical score, studies were given a quality rating of “High”, “Moderate”, or “Low”. High-quality studies were made up of those with a score of “yes” responses for all MMAT questions, and a low-quality rating given to those scoring less than half of the seven criteria (Louey et al., 2024). Hong et al. (2018) discourage the use of low scores as a basis for excluding studies due to methodological quality; few studies are completely free from methodological flaws (Hannes et al., 2011), and studies with a low-quality rating may still offer new insights, despite methodological issues (Dixon-Woods, 2007). Along with the study characteristics, Appendix A shows the individual appraisal scores, with Appendix B providing a more detailed breakdown of the quality assessment results for each study.

Data extraction

A data extraction form was designed based on that provided in the JBI guidance for convergent integrated mixed methods reviews (Lizarondo et al., 2020), with data extracted from studies relating to the sample, design, measures used, results, and quantitative to qualitative conversions (Appendix A). Quantitative data included both descriptive results (averages or percentages) and analytic results (relationships between variables), with all

relationships relevant to the review question considered. Qualitative data were extracted through themes or subthemes relevant to the review question and supported with quotes.

Data transformation

Following extraction, the quantitative data were transformed into qualitative data to facilitate integration. This involved conversion into textual, declarative stand-alone sentences to be presented as a narrative interpretation in answer to the review question (Appendix A).

Data synthesis and integration

A convergent integrated approach was taken in how the data were combined and reported, according to the JBI methodology for MMSRs (Stern et al., 2020). Meta-analysis for the quantitative studies was not possible due to substantial differences and heterogeneity across the studies in terms of the operational definitions, measurement tools used, and the type of sport and athlete in the sample. For this reason, following transformation of the quantitative data into textual descriptions, they were pooled with the qualitative data similar in meaning to provide an integrative narrative synthesis (Popay et al., 2006) in the form of themes, an approach referred to as weaving (Fetters & Freshwater, 2015).

Findings

Overview of studies included

The 23 papers included in the review comprised 5179 participants in total, conducted across nine countries (United States, Canada, United Kingdom, Turkey, New Zealand, Brazil, Australia, the Turkish Republic of Northern Cyprus, and Poland). Samples consisted of athletes from sports including weightlifting, American football, soccer, baseball, basketball, wrestling, and gymnastics, with a variety of methods used to capture both the assessment and experience of body image. Quantitative methods were all observational rather than

experimental, and included assessments measuring muscular satisfaction (e.g., the Drive for Muscularity Scale by McCreary and Sasse [2000]), appearance anxiety (e.g., the Appearance Anxiety Scale by Dion et al. [1990]), and assessments capturing the ideal shape sought (e.g., the Muscle-Based Silhouette Measure by Frederick et al. [2005]). A full list of all the quantitative assessments used can be found in Appendix A. Qualitative methods comprised semi-structured interviews, with mixed methods studies including open-ended questions, focus groups, and a brief interview schedule in addition to standardised self-report measures.

Quality assessment

The 23 papers explored body image in a variety of elite and recreational athletes; some studies compared body image across different sport types, and others explored body image in both a varied range and a specific group of athletes. The MMAT did not reveal any studies as possessing significant methodological flaws, and all were classified as Moderate or High ratings (Appendix B), so in accordance with the suggestion by Noyes and Popay (2007), no studies were excluded from the subsequent synthesis.

Overall, samples appeared appropriate and representative; many specified the type of sampling method (Cafri et al., 2008; Galli & Reel, 2009; Harmancı & Okray, 2021), however some papers did not mention how samples were obtained (Devrim et al., 2018; Gibson et al., 2019). Blouin and Goldfield (1995) used control groups of runners and martial artists, rather than a control group of no sport participation, with unclear reasons for this. Stapleton et al. (2016) also used samples where participants appeared to differ greatly in terms of the exercise duration, ranging from 20 minutes to over an hour. Considering the study also did not measure exercise type (i.e., aerobic/strengthening), there are likely to be differing goals and motivations underlying this variation. Additionally, Atkinson (2011) interviewed 73 participants from nine different sports, but did not clarify individual disciplines when

providing quotes. Hale et al. (2010) recruited bodybuilders but without information if they were competitive, with likely differences in findings based on this. Although aiming to examine body image differences between sports, Killion and Culpepper (2017) provided no rationale for why football, basketball, and baseball were selected. Whilst some studies gained an age-representative sample (Hale et al., 2010; Harmancı & Okray, 2021; Wesolowska, 2020), others were limited, using primarily undergraduate or college students (Edwards et al., 2016; Galli et al., 2015; Satterfield & Stutts, 2021), a population with possibly heightened masculine norms due to the age and environment, and therefore not wholly representative of the entirety of the male athlete population. It was also noted that a lack of demographic data was observed in many studies (Blouin & Goldfield, 1995; Edwards et al., 2016, Pinto et al., 2020); factors such as ethnicity, sexual orientation, and socioeconomic status are also likely to affect body image.

Most studies used validated scales, with the exception of Goltz et al. (2013), where Brazilian versions of measures were used that had not been tested for external validity with athletic populations. Studies in general appeared to prioritise tools focusing on male body image disturbances, and some altered tools to acknowledge population-specific differences; Gibson et al. (2019) altered the focus on “weight” to “skinfolds” and “body fat” to more accurately represent body image concerns for the rugby player population. Blouin and Goldfield (1995) developed their own “Drive for Bulk” scale which was adapted from the “Drive for Thinness” scale forming part of the Eating Disorder Inventory, reversing the direction of the items. Although questionable as these scales have not been validated, and eating disorders and MDD are not necessarily directly antithetical, it does demonstrate adapting the measures to the male population in acknowledgement of differing body image manifestation. On the contrary, some studies used tools that selectively measured female-oriented concerns, as opposed to capturing muscularity focused body image disturbance

(Goltz et al., 2013; Pickett et al., 2004). The latter study did refer to the absence of specific muscularity-based measures (e.g., the Drive for Muscularity or the Bodybuilder Image Grid) at the time of completion, however.

Some studies also supplemented results using anthropometric measures: skinfold measurements and body fat percentage (Gibson et al., 2019), height, weight, and body composition (Killion & Culpepper, 2017), fat free body mass index (Pickett et al., 2004), and body weight, height, and skinfolds (Goltz et al., 2013), all suitable considering the research aims of investigating disparities between actual and perceived body image. Studies utilised statistical analyses that appeared generally appropriate; Wesołowska (2020) did not report effect sizes however, which could have facilitated clinical decisions.

Whilst there appeared to be no significant ethical issues across studies, many studies did not explicitly mention ethics (Blouin & Goldfield, 1995; Fasczewski et al., 2022; Galli & Reel, 2009), and Goltz et al. (2013) stipulated that participation was encouraged by the provision of anthropometric results. Considering that 27.6% of the sample had disordered eating behaviours and thus may have struggled having an objective measure of their body composition, unintentional coercion could be queried. Additionally, whilst Atkinson (2011) and Galli and Reel (2009) demonstrated some awareness of positioning and reflexivity in acknowledgement of the researcher as an instrument in the study, epistemological positioning was generally not considered by other studies.

Qualitative paradigms also appeared appropriate for all studies that used interviews (Atkinson et al., 2011; Galli & Reel, 2009; Nelson & Jette, 2022), although not all studies included interview guides or examples of questions utilised. Whilst Pinto et al. (2020) used focus groups in addition to quantitative self-report measures, it was unclear why these were chosen over interviews considering that participants would likely have felt more comfortable

discussing medical information in an individual interview. In a similar vein, Atkinson (2011) described conducting interviews in their university office, in the respondents' homes, or in a local coffee shop; the latter location would suggest a non-confidential space and no justification was provided regarding such location variation.

Narrative synthesis

The 23 papers were synthesised into five themes in total (Table 2) that encapsulated two overarching categories of sport-specific discourses, and gendered, masculinity discourses, with some overlap and interweaving between the two (Figure 2); later explicated in the Discussion chapter.

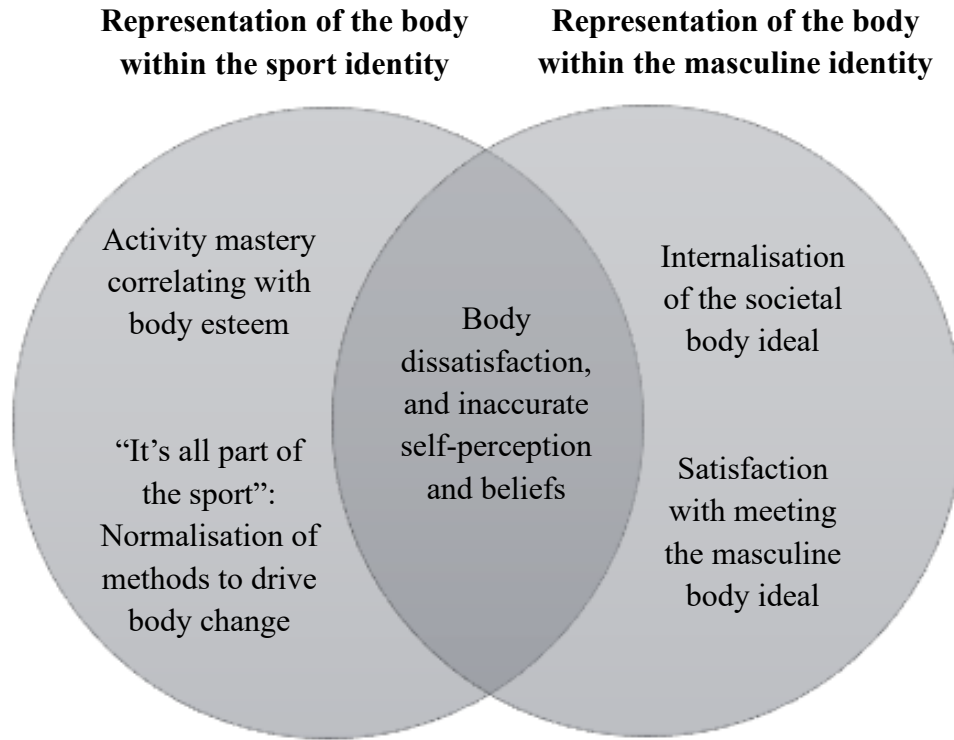
Table 2*Themes found in the narrative synthesis*

Papers	Activity mastery correlating with body esteem	“It’s all part of the sport”: Normalisation of methods to drive body change	Body dissatisfaction and inaccurate self- perception and beliefs	Internalisation of the societal body ideal	Satisfaction with meeting the masculine body ideal
Atkinson (2011)	•	•	•	•	
Blouin & Goldfield (1995)	•	•	•	•	
Cafri et al. (2008)			•		
Devrim et al. (2018)		•	•	•	
Edwards et al. (2016)			•	•	
Fasczewski et al. (2022)	•	•		•	•
Galli & Reel (2009)	•	•	•	•	•
Galli et al. (2015)	•	•		•	
Galli et al. (2017)		•		•	
Gibson et al. (2019)			•	•	•
Goltz et al. (2013)	•	•			
Hale et al. (2010)	•			•	•
Hallsworth et al. (2005)	•	•	•	•	

Papers	Activity mastery correlating with body esteem	“It’s all part of the sport”: Normalisation of methods to drive body change	Body dissatisfaction and inaccurate self- perception and beliefs	Internalisation of the societal body ideal	Satisfaction with meeting the masculine body ideal
Harmancı & Okray (2021)			•	•	
Killion & Culpepper (2017)	•		•	•	•
Nelson & Jette (2022)	•	•	•	•	
Petrie & Moore (2023)		•	•	•	•
Pickett et al. (2005)			•	•	•
Pinto et al. (2020)	•	•	•		
Satterfield & Stutts (2021)	•	•	•	•	•
Stapleton et al. (2016)	•		•	•	
Steinfeldt et al. (2011)	•	•		•	
Wesołowska (2020)	•				

Figure 2

Venn diagram of the themes positioned according to their overarching cultural discourse



Activity mastery correlating with body esteem. Athletes in many studies linked positive perceptions of their bodies to being strong and performing well in their sport, for example gymnasts (Pinto et al., 2020) and martial artists (Goltz et al., 2013). In the latter study, those who had a higher body fat percentage had greater body image dissatisfaction scores than those who did not meet the body shape stereotype associated with the sport. Additionally, the need for muscularity was conceptualised in functional terms for many football players, where a significant relationship was found between identifying with the athletic identity and the desire for muscularity (Steinfeldt et al., 2011). A participant shared that he wanted to be more muscular “to be stronger at [his] sport and [his] position” (p.333), and that it was “part of being an athlete – for your body not to break down in competitive situations, it must first be built up” (p.333). An athlete in the sample of wrestlers by

Fasczewski et al. (2022) shared that activity mastery came with “focusing on wrestling technique, and getting extra workouts to improve physical ability and confidence” (p.5), with 67.5% of wrestlers attributing their success to working hard and persevering within the sport. In a similar vein, long-distance runners had more positive ratings of their own body image and satisfaction with appearance than controls, which was related to the acquisition of abilities, increasing global self-esteem and a sense of activity mastery (Wesołowska, 2020).

Increased activity mastery was also found in sports where appearance was prioritised, namely bodybuilding (Hale et al., 2010; Hallsworth et al., 2005; Stapleton et al., 2016). Lower body satisfaction scores were found in recreational gym users, which was thought to result from lower activity mastery than that in competitive bodybuilding (Stapleton et al., 2016), along with bodybuilders having higher muscularity satisfaction than a powerlifting comparison group, which was again related to feelings of increased activity mastery in the former group (Hale et al., 2010). On a somewhat antithetical note, weightlifters in the paper by Nelson and Jette (2022) spoke about the absence of one singular acceptable body fat percentage or “look” that dictated success as an Olympic weightlifter; they could be a “fat man or tall and lanky and skinny” (p.586) and still succeed. Body ideals were flexible and variable in this sport depending on weight class, with an “emphasis on body functionality regardless of body composition” (p.587). Another study found that competency was rated by weightlifters and controls as more important to self-concept than appearance, with these two groups having higher levels of body satisfaction compared to the bodybuilding group (Hallsworth et al., 2005).

“It’s all part of the sport”: Normalisation of methods to drive body change. A certain level of behaviours that would likely be otherwise deemed pathological appeared normalised in certain sports, such as those emphasising leanness (Galli et al., 2017; Goltz et al., 2013; Petrie & Moore, 2021; Pinto et al., 2020), those imposing weight restrictions

(Fasczewski et al., 2022; Galli & Reel, 2009; Galli et al., 2015; Nelson & Jette, 2022; Satterfield & Stutts, 2021), or those preferring and desiring muscularity (Blouin & Goldfield, 1995; Devrim et al., 2018; Steinfeldt et al., 2011). In a gymnast sample (Pinto et al., 2020), an athlete spoke about the importance of weight: “50% of our performance is our weight” (p.968), and others discussed a degree of food restriction prior to a competition: “We would follow more drastic diets to lose weight faster if there was a competition” (p.968). Wrestlers were found to engage in drastic weight fluctuations regularly to qualify for lower weight categories and gain a competitive advantage, with other sports requiring extended periods of leanness linked with more dietary restriction and risky behaviours (Goltz et al., 2013). Such weight leverage to fit classes was observed in athletes increasing or decreasing their body weight, both accompanied by risks which participants discussed having to weigh up (Nelson & Jette, 2022). Studies with wrestler samples also found a high percentage to report extreme methods of weight control as part of the ability to succeed, which involved increased exercise frequency, extreme caloric restriction, vomiting, and laxative use (Fasczewski et al., 2002; Satterfield & Stutts, 2021). An athlete shared “constantly doing cardio and lifting weights”, and “constantly working either for school or wrestling and only stopping to sleep” (Fasczewski et al., 2022, p.6). These behaviours, often observed in those with eating disorders, were also found in some bodybuilding samples, along with increased risk of steroid use (Blouin & Goldfield, 1995). This was echoed by Hallsworth et al. (2005) and Devrim et al. (2018), where higher scores on eating disorder measures equated to higher desire for more muscle mass in bodybuilders. Such corresponding eating pathologies were linked to the bodybuilders “defining [themselves] in terms of appearance rather than competency” (Hallsworth et al., 2005, p.461).

Athletes often linked their bodies with hard work and success, but that this needed to be observable to the outside eye: “If it’s not lean enough to work, you’ve probably not got

enough commitment to stay in the sport for a long time, and people will clock that immediately” (Atkinson, 2011, p.237). Another athlete in the same study encouraged “keeping your body thinned out for sport and avoiding food when you need to” (p.238), “construct[ing] emaciation as normative” (p.240). Athletes in this study appeared to be laden with pro-thinning beliefs and practices, with regular bouts of intense dieting encouraged and normalised, as opposed to a “deviant or pathological component of sport culture” (p.247). A sense of pressure was also conveyed from coaches, with the pressure to “make weight” in wrestling a priority (Satterfield & Stutts, 2021). Such pressure from coaches was also found by Galli et al. (2015), which appeared to influence athletes’ drive for muscularity. This drive for muscularity and other behaviours such as excessive exercise was heightened in teams where regular weigh-ins were conducted (Galli et al., 2017). Athletes from varied sports shared that “there’s a punishment if you don’t make your weight”, and “I’ve had coaches make plenty of jokes ... you go home and you think, ‘Do I really need to lose weight?’” (Galli and Reel, 2009, p.101). Pressures of fitting into the uniform also contributed, with a diver sharing that “they handed [him] this size 28 Speedo ... [he is] a 32” (p.101); such shame that seemed instilled in the athletes appeared to have precipitated or encouraged extreme behaviours.

Body dissatisfaction, and inaccurate self-perception and beliefs. Athletes in some studies were faced with a dilemma between functionality and appearance, with appearance-oriented motivations working against the performance demands of the sport (Killion & Culpepper, 2017; Nelson & Jette, 2022; Pinto et al., 2020). Unhelpful and inaccurate beliefs about weight gain in sport appeared to prevail in some studies; for example, gymnasts presented with desires to lose weight but also gain muscle and strength; incongruous for already lean and high-performing athletes (Pinto et al., 2020). In a similar vein, baseball players showed some unwillingness to increase strength due to the often inevitable

accompanying decreases in speed and agility (Killion & Culpepper, 2017). Weightlifters also believed that extraneous body fat held positive implications for other athletes but not themselves, referring to this as “inefficient” and “useless fluff” that might hinder performance (Nelson & Jette, 2022, p.588). Athletes from a range of other sports were also found to be dismissive of alternative knowledge about nutrition and body size (Atkinson, 2011); overall, indicative of some cognitive inflexibility regarding body size and shape and athletic performance.

Body dissatisfaction was commonly found in studies with bodybuilder samples, despite being an athlete group more likely to meet the mesomorphic ideal (Blouin & Goldfield, 1995; Cafri et al., 2008; Devrim et al., 2018; Hallsworth et al., 2005; Harmancı & Okray, 2021). Across the studies, athletes’ perceived ideal body weight was larger than their current body weight, which was found to be associated with perfectionism, ineffectiveness, low interoceptive awareness, and low self-esteem. As described by Harmancı and Okray (2021), “inadequate perception of physical size and strength is negatively related to body satisfaction” (p.5); the more athletes strived for muscularity, the more inaccurate their self-perception and therefore overall body satisfaction (Cafri et al., 2008; Devrim et al., 2018; Harmancı & Okray, 2021; Satterfield & Stutts, 2021; Stapleton et al., 2016). One study found this effect to be limited to competitive bodybuilders as opposed to weightlifters; the latter may have had less aesthetic motivation underpinning their training (Hallsworth et al., 2005). Such studies therefore unsurprisingly found the athletes to score highly on measures assessing for MDD (Cafri et al., 2008; Devrim et al., 2018; Harmancı & Okray, 2021).

Body dissatisfaction however was not limited to bodybuilder samples, with baseball players expressing some body dissatisfaction (Killion & Culpepper, 2017), and 87.5% of gymnasts reported their body shape to be smaller than what was considered desirable (Pinto et al., 2020). Athletes across other sport disciplines also expressed that they felt certain

elements of their physique did not match up to body standards for men in general, or men in their sport: “You’re supposed to be this athlete, so you should look like what I think other people would think an athlete would look like ... and that’s toned and lean and muscular” (Galli & Reel, 2009, p.102). Comparison to others was also prevalent in this study: “Does my body compare to that? Do I have that? Do I have this?” (p.100). Rugby union players also showed some discrepancy and inaccuracy in perception of their body, with many wishing to increase their fat-free mass (Gibson et al., 2019). Athletically active men had lower body satisfaction scores than both competitive bodybuilders and weight trainers, hinting that not meeting such muscular ideals related to lowered body satisfaction (Pickett et al., 2005).

Internalisation of the societal body ideal. Dominant discourses around the male body as stipulated by societal expectations prevailed in 19 of the 23 papers (Table 2), emphasising the mesomorphic, muscular ideal. Objectification of the male body was prevalent, with the drive for muscularity linked to external gratification and the acknowledgement of sociocultural pressures in conforming to such standards: “Society says it too, that the bigger a man is, the more of a man he is” (Steinfeldt et al., 2011, p.333). The drive for muscularity was linked to traditional masculine norms in football players (Steinfeldt et al., 2011), rugby union players (Gibson et al., 2019), and wrestlers (Fasczewski et al., 2022). Many athletes equated certain muscularity traits with masculinity, for example: “This guy is in shape, this guy is strong, this guy could be dominant” (Galli & Reel, 2009, p.103). Masculine pressures appeared particularly heightened in college samples due to immersion in a “hyper-masculine culture” (Galli et al., 2015, p.64), with links found between the athletes striving for muscularity and beliefs about adhering to traditional concepts of being a masculine man. This even furthered to other qualities associated with Western masculinity norms, such as shame and embarrassment, which were proposed by Atkinson (2011) to be

vital in maintaining the ideal slimmed body: “How can people respect that [an obese person] and feel sorry for someone who won’t work to save their own lives?” (p.243).

The increased susceptibility for some men to be influenced by such mesomorphic ideals appeared to be moderated by autonomy; athletes who were less self-determined were more likely to accept and internalise societal messages about the ideal male body (Edwards et al., 2016). This was also proposed to be a bidirectional relationship in that men with a heightened drive for muscularity may be more sensitised to notice additional societal messages around them or entering environments where such a message might be amplified (Edwards et al., 2016). Galli and Reel (2009) build upon this in that the ability of some athletes to “ignore or devalue societal expectations of the ideal body” (p.102) allowed many to feel positively about their bodies and not be as susceptible to encouragement from coaches to subscribe to a body ideal or be shaped by media influences. The connection of appearance to self-concept in what has been termed “self-objectification” was heightened in a sample of bodybuilders, compared to weightlifters and controls (Hallsworth et al., 2005). Perfectionism was another variable suggested in the study to moderate the relationship between self-objectification and body dissatisfaction, postulated by the authors to possibly motivate men in their involvement with practices aimed at “attaining cultural ideals of male muscular appearance” (p.462). Self-weighing frequency also appeared to influence the vulnerability to sociocultural pressures, with athletes who weighed themselves more than seven times per week more likely to have internalised societal appearance ideals than other groups (Galli et al., 2017). Excessive self-weighing was likely to “prompt athletes to become overly sensitised to their bodies” (p.53), and the increased likelihood to look for images in the media that may confirm such ideals about appearance, body size and shape, and athleticism and muscularity.

Galli and Reel (2009) shared excerpts from participants who disclosed that “[they] always see the Men’s Health people – perfect, you know ... 90% of [the ideas about the ideal body] come from that” (p.102). Salience of body ideals in the media was reflected in other studies as having a strong influence over the desire for muscularity or general body pressures faced by the athletes and the need to be closer to such an ideal (Killion & Culpepper, 2017; Pickett et al., 2005; Satterfield & Stutts, 2021). Increased attendance to muscularity and appearance was even found in powerlifters, despite this not being necessarily required for the sport (Hale et al., 2010), indicating some level of the desire to match up to a male body ideal. Even the location of muscle in the body appeared important in many studies; baseball players specified a desire to improve muscularity contained in the upper torso compared to two other athlete groups (Killion & Culpepper, 2017), with the societal masculine norm of upper body muscle (i.e., chest, back, biceps, triceps) emphasised and desired (Petrie & Moore, 2023). Some studies discussed how participants felt able to distance themselves from these societal ideals, with weightlifters in Nelson and Jette (2022) referring to media images of muscular men as lacking sport-specific functionality; being stronger and more competitive appeared more meaningful than just “looking” muscular. This was echoed in Atkinson (2011) who found some male athletes to reject muscular ideals in favour of sport-specific thinness in what was deemed “emaciation” (p.225).

Satisfaction with meeting the masculine body ideal. Many athletes in the papers reported a moderate to high level of body satisfaction, such as wrestlers (Fasczewski et al. 2022; Satterfield & Stutts, 2021), and football and basketball players (Killion & Culpepper, 2017), along with a sample comprised of swimmers, divers, football players, baseball players, and golfers (Galli & Reel, 2009). The open-ended qualitative responses as part of the former mixed methods study showed that the virtues of being a successful wrestler aligned with many traditional Western masculinity norms and hinted at the satisfaction of meeting these,

which included being “hardworking”, “disciplined” and “hard-nosed”, in a sport “requiring grit” and “tenacity” (Fasczewski et al. 2022, p.5). Galli and Reel (2009) emphasised that despite some dissatisfaction, 70% of athletes shared feeling generally positive about how their body looked, citing confidence as the key factor in feeling comfortable in their body, along with being an athlete enabling them to represent or more closely fit the muscular ideal. This was also echoed by Gibson et al. (2019), finding congruence between the actual and desired body mass of rugby union players, who possessed the tall and muscular body shape considered ideal by society. Petrie and Moore (2023) found generally high body satisfaction in collegiate athletes across 20 sports, with the highest satisfaction with muscularity and lowest satisfaction with leanness and thinness, again indicating the idealised muscular and mesomorphic shape.

Pickett et al. (2005) found that competitive bodybuilders and weight trainers held more favourable views of their physical appearance than athletically active controls, along with less physique anxiety, suggestive of the fact they both meet the mesomorphic ideal; perhaps more than the active controls who exercise but without the specific weight training aimed at increasing muscle size. Competitive bodybuilders were particularly satisfied with their abdominal area, and along with the weight trainers, were more satisfied with their upper torso area and overall muscle tone than the physically active controls, agreeing with other studies highlighting the importance of location of muscle (Petrie & Moore, 2023). Although the bodybuilders wanted to gain more muscle, “this aspiration did not diminish their body image satisfaction in other respects” (Pickett et al., 2005, p.220). This finding appeared consistent in another sample of bodybuilders, who scored lower on drive for muscularity scales than powerlifters, suggesting some degree of satisfaction with the muscle attained (Hale et al., 2010).

Discussion

Summary of results

The synthesis of 23 studies found that five themes represented how male athletes reported and experienced body image concerns and dissatisfaction, split between two overarching cultural discourses: representation of the body both within the sport identity and the masculine identity. The greater the athletic identity, the more likely the athlete is to assign their body to the sport, which involved physical representation of activity mastery, and the normalisation of pathogenic measures to drive body change. The greater the masculine identity, the more likely they are to internalise the societal body ideal. Spanning both discourses are general dissatisfaction and inaccurate self-perception of the body, which related to pressures deriving from both the sport and the idealised masculine attributes enforced by society. The above discourses are combined in different ways; the more the individual identifies with their athletic performance and thus has high athletic identity (Sparkes, 1998), the less stable their individual identity and self-esteem (Nippert & Smith, 2008), possibly resulting in feelings of lowered self-determination and autonomy, making them more susceptible to being influenced by societal body ideals (Edwards et al., 2016). Concurrently, individuals with high sporting performance and thus likely high athletic identity may also feel as though their bodies more closely fit with masculine ideals, resulting in greater satisfaction (Galli & Reel, 2009); athletes are as such coined “cultural archetypal masculine heroes” (Drummond, 2009, p.3).

Application of social identity theory suggests identification with a distinct social group as contributing to a strong sense of identity (Tajfel & Turner, 1978). However, it could be hypothesised that for some athletes in the study, “the creation of a strong athletic identity led to a vulnerable sense of self” (Jones et al., 2005, p.377), which if then disrupted, can lead

to issues with body image (Nelson et al., 2018). Whilst activity mastery can result in increased self-esteem, overidentification with the athlete identity can suggest “premature identity foreclosure” (Jones et al., 2005, p.378), with athletes’ self-worth being dependent on the body and their athletic performance. Both athletic identity and social pressures by teammates can result in participation in health-compromising behaviours (Waldron & Kowalski, 2018), referring to the tendency to “play through pain” or “compete injured” (Mayer et al., 2020), and linked to personality traits such as perfectionism (Schnell et al., 2014). Such tendencies are also commonly found in military populations; the military identity being associated with the acquisition of skills learnt (Woodward & Jenkins, 2011), combined with the hegemonic masculine culture of the military (Higate, 2003), often results in the denial of weakness or vulnerability and the need to maintain both physical and mental toughness, resulting in service personnel enduring strenuous physical training in the presence of pain (Cogan et al., 2021). Interestingly, such masculinity-enacting behaviour has been found in men regardless of athlete or military status: avoiding medical care, refusing to take days off due to sickness, and denying the need for sleep (Courtenay, 2000).

There was also a degree of body satisfaction evidenced in many athletes; it appeared as though just being part of a sport enabled many men to “feel masculine”, which relates to *gender role strain* by Pleck (1995): the disparity between themselves and the concept of masculinity, which generally encompasses a muscular body in Western society (Klein, 1993). As many men throughout the studies trained and competed in sport at a high level, it is likely that they identified with the muscular ideal more than the average male, possibly similarly to the military population where personnel regularly enact “male-like” behaviours (Atherton, 2009). This finding agrees with research suggesting greater body satisfaction in athletes than non-athletes (Burgon et al., 2023); however, it is likely to be nuanced and influenced by the factors detailed above. Although male athletes may feel as though they fit the expectation or

ideal, the complex dynamics of the competitive or elite nature of their sport may mean that they are called to rely on behaviours that would be otherwise deemed pathogenic (Chatterton & Petrie, 2013).

Clinical and research implications

The review highlights the importance of ascertaining motivations underlying sports particularly centred in leanness or imposing weight categories; many studies suggested increased eating disorder risk alongside the body image difficulties, predominantly those in weight-sensitive sports, like jiu-jitsu, rowing, gymnastics, and swimming (Goltz et al., 2013). Participation in sports with standardised weight requirements, such as wrestling and boxing, appeared to coincide with pathogenic weight-loss behaviours to gain an advantage in the sport, which has been supported in the literature (Chapman & Woodman, 2016; Morton et al., 2010). This also has application to the military veteran population considering that “making weight” during military service is found to be related to eating pathology later in life (Masheb et al., 2019). Bodybuilder athletes also had increased risk of steroid use, which has clinical implications both physically and psychologically (Ip et al., 2012), with higher body dissatisfaction equated to higher steroid use (Blouin & Goldfield, 1995). Education programmes centred on steroid use could be implemented considering increase in healthcare utilisation in the UK (McVeigh & Begley, 2017), along with further development of athlete-specific screening measures; during the current review, the Athletic Disordered Eating (ADE) Scale was devised (Buckley et al., 2024) to address limitations of existing eating disorder tools in athletes (Pope et al., 2015).

Some papers cited the coach-athlete relationship, with coaches having a significant role in pressures associated with the sport, athletes’ body, and athletes’ overall athletic identity (Galli & Reel, 2009; Satterfield & Stutts, 2021). It is important for athletic

organisations to be aware of coaches' roles in influencing pathogenic behaviours, and highlights further study, considering that other research has stipulated the body as a "biological object to be unproblematically trained, manipulated and measured" (Jones et al., 2005, p.378), and that particularly in high-level sports, it is characterised by an unequal power dynamic (Gaedicke et al., 2021). Again, this mirrors the hierarchical structure of the military (Keeling, 2018) and the possible influence of the institution on how body image is experienced. Future research could therefore possibly focus on the experience of retired athletes, to explore body image in the context of transition. It has also been suggested that the drive for a certain body type is present in athletes before even entering the sport (Atkinson, 2011). As this information was not included in any other studies reviewed, future research may benefit from exploring this, particularly in terms of eating disorder pathology; certain characteristics may precipitate vulnerability to eating disorders (Claes et al., 2023). It would also be useful to explore further in the veteran population in terms of whether a more rule-driven, physical exercise-based career is attractive to people predisposed to eating and body image difficulties (Bartlett & Mitchell, 2015).

Limitations and critique

Research into body image in athletes generally provides different and sometimes contradictory information about those who participate in sport and physical exercise, largely due to differences in gender, age, sport, and motivation to undertake training (Hausenblas & Downs, 2001). The current review also synthesised papers with varied exercise participation, motivations for exercise, and aesthetic drive; for example, Atkinson (2011) studied male athletes who were "emaciating", whereas others studied male athletes who were bodybuilding and so becoming intentionally bigger (Blouin & Goldfield, 1995; Devrim et al., 2018; Hallsworth et al., 2005). There may be difficulties therefore in creating a synthesis from research so diverse, supported by researchers suggesting the literature on bodybuilders to

skew the understanding of body image in men (Atkinson, 2007; Pope et al., 2000). The categories may have differing relevance depending on sport type; for example, the body dissatisfaction category and increased likelihood of MDD may be more commonly observed in those practising bodybuilding or weightlifting, and activity mastery more likely to be found in niche, specific sports.

The Athletic Identity Measure Scale (Brewer et al., 1993), utilised in some studies reviewed, measures the extent to which the person ties their identity to athletics or sport competition. Although high internal consistency (Lochbaum et al., 2022), results suggest greater athletic identity in elite athletes compared to recreational athletes (Leddy et al., 1994), along with significant others such as coaches, teammates, and parents also affecting athletic identity (Nippert & Smith, 2008). In the current review, both elite and recreational athletes were pooled and considered as one, which could have skewed the eventual synthesis. Also, significant others were not studied in most papers, meaning that this could not be examined in the context of the research question.

The primary body image measures utilised in the papers were extracted and used in this review to directly answer the review question. However, some studies measured body image in the context of other constructs, such as narcissism (Harmanci & Okray, 2021), objectification (Hallsworth et al., 2005), and self-determination and autonomy (Edwards et al., 2016). This questions whether the review was reductionist in omitting other important contextual information; research has found body image to be influenced by other factors such as perfectionism (Grammas & Schwartz, 2009), social anxiety (Pawijit et al., 2019), and neuroticism (Swami et al., 2008).

Research has also suggested an inconsistent operational definition of body image in the literature; constructs assessed under the body image umbrella have included perception of

body size, evaluation of appearance, physique anxiety, and other appearance-related avoidance (Thompson, 2004). This could be reflected in the current review due to the diversity of scales used (Appendix A); it may be that some studies measured perceptions of appearance, whereas others measured attitudes about appearance (Hausenblas & Downs, 2001). Although avoiding this may have proved difficult in the current review due to the scarcity of research, future studies may benefit from stricter definitions for more transparent measurement of constructs.

Methodology

Chapter overview

This chapter lays out the methodology of the empirical study component of the thesis. It provides evaluations and justifications around the chosen ontological and epistemological frameworks of relativism and social constructionism respectively, followed by the study methodology, including rationale behind the choice of a qualitative paradigm and grounded theory design. The recruitment strategy, procedural components of the study, and analysis are then further discussed in relation to semi-structured interviews with 18 military veterans. Finally, the ethical considerations are detailed, along with concluding descriptions of the different strategies used to satisfy methodological rigour.

The research paradigm

Guba and Lincoln (1994) dictate three fundamental areas informing a particular research design: *ontology* (the form and nature of reality), *epistemology* (the basic beliefs about knowledge), and *methodology* (the approach to how knowledge is obtained). These are carefully evaluated to illustrate how the researcher arrived at the final research design.

Ontology

Ontology as a branch of philosophy is concerned with the nature and structure of reality; “the study of attributes that belong to things because of their very nature” (Guarino et al., 2009, p1). Realism, critical realism, and relativism are detailed below, for the purpose of explaining why the latter is most appropriate for the current study.

Realism and critical realism

Realism as an ontological position is posited as “the view that entities exist independently of being perceived, or independently of our theories about them” (Phillips,

1987, p.205). As applied to research, there are objective facts about the phenomena that exist in the world, and that data is representative of the nature of what is being studied, ultimately ascertaining a level of truth about the world. This would suggest that knowledge can be measured objectively (Boyd, 1983); although positioning psychology as scientific and encouraging dominant theoretical disciplines of behaviourist and cognitive psychology in the twentieth century (Miller, 1999), there are limitations with applying such hypothetical, deductive paradigms to complex social phenomena (Rodwell, 1987). The *critical realist* position has been attributed as a resolution, or a “third way” alternative (Reed, 2009), acknowledging that whilst there is a reality existing independently of one’s thoughts, existence is not solely dependent on its observation (Sayer, 2004). As such, it has been used within the psychology discipline to study both the natural and social worlds (Pilgrim, 2019) and utilise diverse methods of data collection and analysis (Willis, 2023), as opposed to searching for universal regularities (MacKay & Petocz, 2011).

Relativism

On the other hand, *relativism* posits that several versions of the same world exist, acknowledging subjectivity and the construction of the world based on individual or cultural perspectives (Hugly & Sayward, 1987). This is best suited to qualitative paradigms exploring the meaning made of particular social phenomena, acknowledging that this is only one version of the world relative to an observer (Nola, 1988). This appeared most appropriate for the current research in acknowledgement that another researcher might construct meanings or interpretations differently; “there are many valid interpretations of the same observation and so data are not seen as directly mirroring reality” (Harper, 2011, p.86).

Epistemology

Epistemology is derived from the ontological standpoint and is concerned with the nature, origin, and theories of human knowledge, how reality is understood and communicated to others, and how these can be accessed through research (Bracken, 2010). The relativist ontology therefore gave way to the following epistemologies; whilst both interpretivist and constructivist approaches believe that understanding is based on interpretation, they vary in the manner they understand social worlds, each offering a different conceptualisation (Schwandt, 1994).

Interpretivism

Interpretivism embraces how the social world is individually felt, perceived, and experienced, based on individuals' own perspectives and narratives (Potrac et al., 2014), with human interpretation taken as the "starting point for developing knowledge about the social world" (Prasad, 2005, p.13). Although interpretivism acknowledges reflexivity, it prioritises privileging the voices of the participants and understanding lived experience by those who live in it (Potrac et al., 2014).

Constructivism and social constructionism

On the other hand, *constructivism* encompasses how reality is constructed through interaction with others (Schwandt, 1994). Whilst the terms constructivism and social constructionism are often used interchangeably, particularly under the generic term "constructivism" (Andrews, 2012), there are nuances between the two. Constructivism has been thought to revolve around the construction of experiences through cognitive processes, whereas *social constructionism* places the entire onus on language, narratives, and sociohistorical and cultural processes (Crotty, 1998). Holding an understanding of different social constructs within varied social contexts and time periods is key in studying the armed forces (Woodward & Jenkins, 2011), considering that identity originates from the social

realm (Burr, 2003) and the earlier discussed topics of military culture and collective identity having a focus on meaning making (Allen, 2005). The study aimed to explore “jointly constructed cognitive understandings of the world among individuals who share the same experience” (Griffith & Ben-Ari, 2021, p.637), with the thesis a construction in itself, having to move beyond the constructivism of the interviews; overall therefore, a social constructionism paradigm felt most fitting.

Researcher’s positioning statement

It is acknowledged that qualitative research cannot be truly unbiased, as the researcher is the primary research instrument (Charmaz, 2014), whose own values will inevitably impact interpretations of the data and the study outcomes (Jamieson et al., 2023). Ensuring rigour despite this was prioritised at each step of the study and is further detailed in this chapter. It begins however with a reflexive statement to acknowledge any pre-existing biases or beliefs held by the researcher in a way of turning “the analytic gaze inwards” (Seim, 2024, p.138), and for this reason, is postulated in first-person:

I am a white, heterosexual, 33-year-old female from a working-class background. Although I have no military experience and do not match the gender demographic of the participants, I have a history of body image difficulties, having been unwell with an eating disorder in my late adolescence and early adulthood years. This was a likely contributor to my personal interest in exploring the intersection of body image and exercise. Additionally, my grandfather was a military veteran and following a road accident and the passing of my grandmother from multiple sclerosis, he lived a very isolated, solitary life and subsequently died some years later. I sadly never had the opportunity to explore his life further with him, but from my experiences over the years, I have had the privilege of speaking to other veterans about their experiences. It led to me wanting to hear more about the voices of a group who

may feel cut off from society and exist in their own, relatively isolated, group. I wondered if I could use my power and privilege as a trainee clinical psychologist undertaking doctorate research to explore this further.

From a professional perspective, I previously worked in a primary care NHS service where the referrals received from men usually comprised their first contact with mental health services. I was thus acutely aware of making sure they felt listened to and heard, so they were not deterred from returning. It also meant that I heard directly from men about their own experiences and often unique manifestations of distress. I therefore wondered what this would be like in a population where the stigma was even greater and there were possibly more ramifications attached to speaking about their experiences.

Evolution of the project and collaboration

Initial attempts to explore body image amongst military veterans resulted in limited interest for participation. The researcher collected feedback from other researchers in the field and two military veterans, where it was communicated that it was possible that the research was overly framed from an academic standpoint. Insufficient consideration for how the target population might experience research and lack of accessibility has been put forward by literature aiming to make academia more accessible (Brown et al., 2018). For this reason, the advertisement materials were framed instead with a focus on exploring the role of physical exercise. Consultation with the researchers and veterans aided with further modification of how the study was presented, including improving accessibility (reducing the steps needed to take part, such as directly putting the questionnaire link and QR code in the advertisement, and having a summarised, jargon-free version of the Participant Information Sheet), and replacing the term “military veteran” with “ex-Armed Forces personnel”. Such adjustments

have been supported by other research into increasing the accessibility of research, particularly for accessing populations more difficult to reach (Ellard-Gray et al., 2015).

Research methodology

Qualitative methods

Considering the ontological and epistemological positioning of the study, a qualitative paradigm was most appropriate due to exploring subjective realities, contingent on the interpretation of the researcher (Poucher et al., 2020). Although qualitative research has been criticised as being “unsystematic, idiosyncratic, biased, and intuitive” (Charmaz & Thornberg, 2021, p.310), Glaser and Strauss (1967) argued for the evaluation of qualitative research on its own principles, as opposed to those imposed by more dominant quantitative frameworks. To enhance transparency in understanding how data analysis was performed and findings interpreted, qualitative research must be conducted in a methodologically rigorous manner to yield meaningful and useful results (Nowell et al., 2017). Such principles are explicated further in this chapter, with the researcher ensuring that each step of the research was sufficiently detailed to ensure transparency and to enable appropriate replicability considering “replications are fundamental to theoretical growth” (Lucas et al., 2013, p.213).

Several qualitative approaches were considered for the study, such as thematic analysis, which identifies recurring patterns or themes in data (Braun & Clarke, 2006). Whilst having the advantage of simplicity, flexibility, versatility, and epistemological compatibility (Braun & Clarke, 2006), along with usefulness in examining different perspectives and highlighting similarities and differences (King, 2004), its flexibility can result in an inconsistent collection of themes (Holloway & Todres, 2003). It is also sometimes predominantly descriptive rather than explanatory (Fryer, 2022) and if used incorrectly, occasionally reductionist in the fragmentation of discourse to arbitrary themes (Mavrović,

2023). Narrative analysis was also considered, which seeks to explore life experiences to interpret and understand how these are made sense of (Reissman, 1993), providing a “window into the process of identity construction” (McAlpine, 2016, p.33). Rather than exploring individual life experiences, the aim of the study was to identify and analyse patterns in the data to develop a new theory and explain relationships between different factors within a certain phenomenon, of which grounded theory (GT; Glaser & Strauss, 1967) offered.

Grounded theory

GT was developed as a systematic method of theory development, keeping theory grounded in the data (Glaser & Strauss, 1967), often described as an appropriate design for the research of areas that have not been previously investigated, or where there are major omissions in existing research and in need of a new perspective (Schreiber & Stern, 2001). There appeared to be a lack of theoretical description of the function of physical exercise for military veterans, along with lack of research into body image in military veterans generally, particularly males (Keeling et al., 2021). The aim was to therefore produce an “explanatory theory that uncovers a process inherent to the substantive area of inquiry” (Chun Tie et al., 2019, p.2), grounded in the data. For this reason, GT appeared most conducive to the current research. Although the traditional work of Glaser and Strauss (1967) encourage not undertaking an early literature review to minimise preconceptions before data is collected, the more recent grounded theorists (Charmaz, 2006, 2014) state the importance of understanding discourse around the topic to “situate [the] work within the body of related literature” (Stern, 2007, p.123). An initial review was also necessary in terms of developing a research proposal for the requirements of institutional funding agencies and ethics boards (El Hussein et al., 2017). In doing so, care was taken not to impose a priori concepts onto the data, however (Strauss & Corbin, 1990).

Although GT methodology has expanded over time, with subsequent divergence from the original GT (symbolic interactionism GT by Strauss and Corbin [1990] and constructivist GT by Charmaz [2006]), it remains the basis for the construction of theory to better understand human experiences (Glaser & Strauss, 1967). Rather than providing a purely descriptive account, GT seeks to explain phenomena under investigation (Dougherty, 2017) and how personal meaning is interpreted for people in the context of social interaction (Glaser, 1992). Despite reluctance to commit to an epistemology, GT was initially developed as a counterpart to the positivistic paradigm (Glaser & Strauss, 1967), suggestive of a more realist stance. Symbolic interactionism GT is also associated with positivist underpinnings due to a variety of factors: assumption of an external world discoverable by observation, separation of the researcher from the research process, and the GT forming an objective view of data (Charmaz & Thornberg, 2021). The more recent constructivist GT (Charmaz, 2006) in contrast, has foundations based on social constructionism, and its congruence to the current research is further elucidated below.

Constructivist grounded theory

Constructivist GT (Charmaz, 2006) differs from the two former strains of GT, largely by increased awareness of the researcher's own subjectivity and the focus of the researcher as a co-participant as opposed to a neutral observer in the study; overall, "acknowledging multiple realities, seeking diverse perspectives, and engaging in critical analysis throughout the research process" (Charmaz & Thornberg, 2021, p.311.) Considering the relativist and social constructionist positioning of the research, the nuance and richness of the jointly created data needed to be acknowledged (Charmaz, 2014); as opposed to being primordial, the essence of interviews is discovered within the interviewee-interviewer relationship and as such, the theory constructed (Kvale, 1999). The researcher was wary of assuming that the data provided biographically grounded experience and meanings of veterans' lives and

instead considered narratives as a form of communication “influenced by the cultural conventions of telling, the motivations of the teller, by the audience, and the social context” (Sparkes, 1999, p.20). The constellation of methods common to all major versions of GT, and differentiating GT from other qualitative approaches, are constant comparison, theoretical sampling, concurrent data collection and analysis, and memo-writing (Birks & Mills, 2015), all of which are further described below.

Constant comparison. As data were generated by the interviews, codes and categories were systematically compared to explore variations and similarities within data. The final stage of analysis consisted of returning to the literature discussed previously to utilise data from other sources, which enhanced understanding of emerging concepts and enabled the refinement of further questions (Bryant, 2019; Charmaz, 2014).

Theoretical sampling. Theoretical sampling as a crucial criterion for GT research (Hood, 2007) involves developing the properties of categories through an iterative process specifically seeking to further illuminate or define categories found (Charmaz, 2014). The aim is to reach *theoretical saturation*, where there are no further developments in later rounds of data generation or collection, categories are conceptually well-developed, and the properties of any subcategories are clearly articulated and integrated (Glaser & Strauss, 1967). According to Hood (2007), this means that the final GT can account for all variations in the data and its associated conditions, with the report being an “analytical product rather than a purely descriptive account” (p.154). Considering constructivist GT postulates whether reality can be truly known (Charmaz, 2017), achieving *theoretical sufficiency* (Dey, 1999) was deemed more appropriate; rather than assuming the completeness of collected data, the researcher reached a point where the theory and categories within it made sense (Morse, 2007). Nelson (2017) also suggested the use of *conceptual depth* to demonstrate prioritising the richness, depth, and diversity of data collected over the quantity (Fusch & Ness, 2015).

The research made use of an interview guide which was refined across interviews to return to emerging topics or gaps in topics identified (Appendix C).

Concurrent data collection and analysis. As another hallmark of GT, concurrent data collection and analysis encourages sequential focus on significant emerging issues by going back to the field to collect more data, to reach theoretical saturation (Glaser & Strauss, 1967). Individual interviews were transcribed as soon as they were completed, followed by the first stage of coding, and at five interviews, the data were compared with each other to form categories. This then determined the direction of the future interviews, and the following five interviews were conducted. This process repeated for the eight interviews in the final iteration, allowing a theory to be developed from returning to the field. The researcher constantly asked analytic questions of the data to move beyond inquiry at the descriptive level and construct explanatory concepts (Charmaz, 2014).

Memo writing. Described as the “bedrock of theory generation” (Glaser, 1978, p.83) and the “storehouse of ideas generated and documented through interacting with data” (Chun Tie et al., 2019, p.4), memo writing is a core activity in GT, which comprises reflective, written documentation of the researcher’s thinking during the process of conducting a GT study. The purpose of memos is to build a historic trail documenting thought processes and reasoning behind decision making, analytic or interpretive notes about the content of the data, and the connections between categories (Lempert, 2007). Memos are illustrated in Appendix D to elaborate the essence of the categories and the final theory, ensuring rigour and quality and enriching theory throughout the process (Charmaz & Thornberg, 2021). This also aided reflexivity and the identification of gaps that required clarification or elaboration through further collection and analysis of data (Strauss & Corbin, 1998).

Sample

Sample size

There is variability in studies in terms of recommendations for minimum sample sizes in qualitative research. Data collection has been generally proposed to continue until discoveries cease and new data no longer contribute to the findings, with sample size in GT unable to be determined a priori due to its contingency on theoretical categories evolving (Glaser & Strauss, 2017). Research into qualitative studies has also pointed out that there is no consensus on sample sizes, and that “an appropriate sample size for a qualitative study is one that adequately answers the research question” (Marshall, 1996, p.523). Some research has found a sample size of 12-15 sufficient (Hennink & Kaiser, 2022); others have suggested 20 interviews as a minimum for GT (Marshall et al., 2013), and results of a review showed sample size in GT studies to range between five to 114 (Thomson, 2011). The dangers of exceeding necessary sample sizes include burdening participants excessively and wasting time (Rahimi, 2024). It was also important to consider the available time and financial resources associated with a DClinPsych project, which may constrain data collection. As a somewhat resolution, recommendations suggest focusing on obtaining rich and diverse information from the samples (Marshall et al., 2013).

Theoretical sampling guided data collection in the current research, which ended upon theoretical sufficiency being achieved; further data collection was unlikely to add additional properties or dimensions to categories already established (Dey, 1999). This was at the stage of data collection of the interviews of 18 participants. Together with research showing that saturation typically occurs between 10 to 30 interviews (Thomson, 2011), this was deemed sufficient for analysis and for the development of the theory.

Key definitions of sample

Military veteran. Despite the aforementioned formal definition of UK military veterans (Office for Veterans Affairs, 2020), this is often a term deemed ambiguous, non-universal, and with varied connotations (Dandeker et al., 2006). This is supported by research that only half of 202 people leaving the military considered themselves veterans; a term thought to be particularly synonymous with older veterans, earned through combat deployment experiences, or reserved for those who served in the World Wars (Burdett et al., 2013). Non-identification with the term can also impact the benefits received, including support schemes and priority medical treatment (Clarkson et al., 2013), meaning that some veterans may be unintentionally excluding themselves from accessing these. It was important for the current study not to replicate this, so following consultation with other researchers, the language in the recruitment materials was changed to “ex-Armed Forces personnel”. No restrictions were placed on the length of time since they served; however, they had to have left the military, which meant that those who were serving members, or reserves, were not eligible to take part. They had to have served in one of the UK armed forces; namely, the British Army, the Royal Navy, or the Royal Air Force.

Mental and/or physical health difficulties. This was kept very broad, following consultation with a colleague who had conducted research in this area, along with the stigma faced by this population and possible reluctance to disclose (Sharp et al., 2015). For this reason, any physical or mental health difficulties did not need to be diagnosed. The only exception to this was stated as someone receiving mental health support in a secondary or tertiary care service, due to being indicative of greater risk (National Health Service, 2018). Although two participants had ticked the “neither physical nor mental health difficulties” option in the questionnaire, upon further elaboration in the interview, there had been some form of injury or mental health difficulty over their lifetime.

Physical exercise. Any form of physical exercise participation rendered participants eligible, which ranged from more solitary physical pursuits such as bodybuilding or running, to more team-based sports such as rugby or football. The questionnaire asked about exercise type, duration, and whether participation was before, during, and/or after the military, with space during the interview to follow up or clarify.

Inclusion and exclusion criteria

The inclusion criteria for veterans to take part were as follows: a) a biological male or transgender male, b) who was over the age of 18, c) based in the UK, d) had previously served in one of the UK armed forces, e) self-identified as having some form of mental health difficulty and/or physical health difficulty, f) self-identified as engaging in some form of physical exercise, and g) could communicate in spoken English. No other inclusion criteria were specified to provide ample opportunity to recruit a diverse, wide range of participants, for example regarding age, ethnicity, and current health status.

The exclusion criteria were as follows: a) currently serving members of the armed forces or reserves, or b) not having served in a UK military service, or c) receiving specialised support for a mental health condition in secondary or tertiary mental health services. The interview consisted of speaking about difficult experiences; excluding participants with a history of psychiatric illness also excluded the possibility of exploring this particular experience. Instead, to preserve ethical boundaries and to ensure that vulnerable participants were not at a risk of harm, exclusion criteria comprised participants who were currently under the care of secondary or tertiary mental health services.

Recruitment

The researcher reached out to researchers and different charities involved in veterans' wellbeing and mental health, with one charity distributing the advertisement (Appendix E) on

their website and social media channels. The researcher also placed the advertisement on different social media sources, which included the “UK Armed Forces” Reddit page, the “UK Military Veterans” Facebook page, and sharing on the researcher’s own accounts created for the purpose of the thesis (Instagram and X/Twitter). The researcher knew of veteran contacts who were able to participate in the interview and distribute the advertisement on their own social media channels and send on private military-related WhatsApp groups. Snowball sampling was also employed, where some participants put the researcher in contact with another veteran who took part, often used for reaching critical situations or people (Cresswell, 2013).

Procedure

Recruitment procedure

Participants expressed interest by completing the questionnaire attached to the advertisement, which contained condensed, accessible versions of the information sheet and consent form (Appendix F). An email was then sent to the participant (Appendix G) when this was received by the researcher to arrange a time for the interview, and asking the participant whether they would prefer the interview to be in-person or online. When the participant responded, they were either sent a Microsoft Teams invitation at the agreed date and time, or they were provided details with how to attend the University of Essex with the agreed location, date and time.

Data collection

Questionnaires. A questionnaire was used to gather demographic and experiences-related information using Qualtrics (Appendix H). Demographic information was collected to determine the characteristics of the population who came forward, to better understand patterns in the qualitative data, and acknowledge that there may be gaps in the study or

understanding limited by groups who did not come forward. This was important to consider as out of 1.85 million veterans in the UK, almost one third are aged 80 and over (ONS, 2023) and overall important in determining the quality of the study and the generalisability of the findings (Sandelowski, 1995). Experiences-related information was also gathered in the questionnaire to provide further information about the characteristics in the sample, such as the length of time as both serving and ex-serving personnel, and further information related to exercise participation and their physical and/or mental health difficulty. Questionnaires obtained from Qualtrics were stored securely in password-protected folders.

Semi-structured interviews. Eighteen semi-structured interviews were conducted altogether between February-December 2024. Fifteen participants were interviewed virtually, and three were interviewed in-person at the university. The duration of the interviews ranged from 40 to 117 minutes, with the average time of interviews 61 minutes. Considering the population characteristics and the research investigating personal lived experiences, semi-structured interviews were used to gather an in-depth, insightful understanding of participants' experiences, perceptions and beliefs (Smith, 1995). Interviewing is a common approach in qualitative research; specifically in GT (Foley et al., 2021). Focus groups, whilst having the ability to collect large amounts of data and used to study collective identity (Munday, 2006), often means that more vocal members dominate and resulting data emerges from social consensus-seeking (Dilshad & Latif, 2013). The exact nature of the sample was also uncertain, meaning that interviews allowed more specific tailoring to the individual needs and communication abilities of the participants, including use of participants' own language (Willig, 2017). As the subject matter broached vulnerable and sensitive topics, individual interviews provided more of an opportunity to establish rapport before asking further questions. As mentioned previously, considering the age and gender demographic of UK veterans (ONS, 2023), older men are consistently found to struggle to reach out for help

with emotional problems and experience difficulty in being open with areas of vulnerability (Apesoa-Varano et al., 2010). Considering the anticipated characteristics of the sample, it is likely that participants would feel less comfortable discussing matters of vulnerability in a group of strangers, particularly if this might be the first time they are being open about such experiences. It felt important for the participants to have space to speak and be heard, considering richness of data is prioritised in GT analysis (Eaves, 2001).

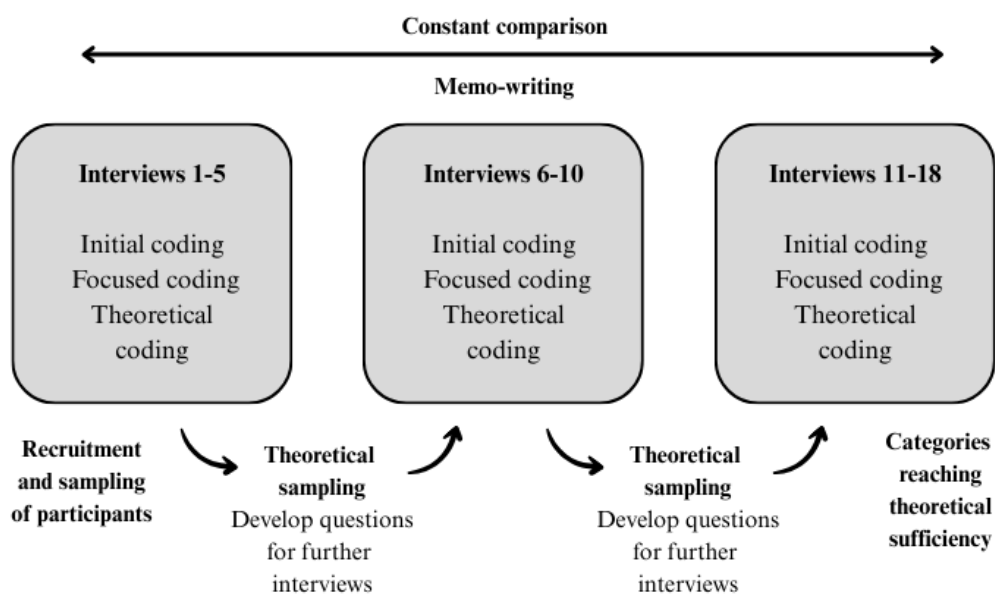
Interview location. Participants were given a choice regarding whether they wished to attend interviews in-person at the University of Essex in Colchester, or online via Microsoft Teams. Providing choice felt important given variation in participant preference and the focus of the study on exercise and the body; research has also shown that participants can feel constrained by a screen which can encourage a degree of separation (Engward et al., 2022). However, given that participants were based in various locations around the UK, it was necessary to offer the option of an online interview, removing the consideration of physical distance as a barrier to participation. This also may support participants with mobility challenges considering that criteria for the study included participants with injury or disability. Virtual interviewing is overall viewed as a “valid and valuable avenue for methodological innovation” (Keen et al., 2022, p.2). With participants’ permission, interviews were recorded, which produced a video and audio recording and a transcript. The recording was deleted immediately after checking the accuracy of the Teams-generated transcript, all of which were anonymised and stored securely on university servers.

Interview guide. As the main function of GT is to develop concepts and theory from the ground up (Charmaz, 2014; Glaser & Strauss, 1967), there was no standardised interview schedule or formulaic method of interviewing. The intention in the current study was to “extract the basic parameters of that phenomenon or process under study with maximum openness to what aspects of it matter most” (Foley et al., 2021, p.4). Therefore, although

informed by topics, the interview guide was kept broad throughout, to minimise influence of a-priori hypotheses (Reiter et al., 2011) or leading questions framing the data; instead, prioritising emergent data (Glaser & Strauss, 1967), and exploring information most pertinent to participants (Gill et al., 2008). Charmaz (2014) also stipulates interview guides to be short, with opening, central and closing questions, in order to remain sensitive to the responses of participants, particularly as the research navigated vulnerable topics with people who have likely had difficult experiences (Dempsey et al., 2016). Open questions such as “how did you feel...” and “how would you describe ...” were used, along with prompts and additional questions inviting further elaboration (Appendix C). With each iteration and analysis of cumulative data, emergent concepts defined the direction of questions for further data, in line with theoretical sampling (Foley et al., 2021). Using the first three to four interviews as guides to “the essence of the phenomena” is recommended (Thomson, 2011, p.47) so that the focus can be narrowed and emergent themes explored (Strauss & Corbin, 1998). For this reason, a similar process was followed (Figure 3).

Figure 3

Diagram illustrating the iterative approach taken to interviewing, informed by the visual representation of GT provided by Tweed and Charmaz (2011)



Analysis

Once the researcher had checked the recordings and ensured the transcriptions were accurate reflections of the recording, she read the transcript in full to familiarise herself with it. Data were then analysed in the stages detailed by Charmaz (2014) and Birks and Mills (2015), with concurrent data collection and analysis meaning that the following stages were repeated for each iteration of data collection. The researcher also wrote post-interview reflections, important for establishing an audit trail (Knott et al., 2022). Continual use of memos constituted reflexivity throughout analysis, for ownership about decisions made regarding the contents and nuances of the data (Glaser, 1978). In doing this, the hope was to maintain openness to the meaning making demonstrated in the interviews by being mindful of the researcher's own processes occurring in parallel (Strømme et al., 2010). Examples of post-interview reflections and memos are provided in the audit trail in Appendix D.

Use of computer software

Due to the quantity of data (a total of approximately 169,000 words from 1097 minutes of interviews), the NVivo computer software tool was deemed necessary in facilitating aspects of the GT procedure and enhancing the data handling and analysis processes (Johnston, 2006). Although occasionally characterised as rigid which could potentially neglect the role of human interpretation and reflection, or force codes and categories upon data, as argued by some researchers (Kelle, 1995), the researcher found a “medium” in that when each transcript was initially coded, she added as many codes as was deemed necessary, meaning that data were not “forced” into categories; if it did not fit a pre-existing code, another code was created. Overall, the software worked for the project, as opposed to making the project work for the software (Richards, 1999). The researcher then further reflected upon and interpreted the codes and reorganised into categories (Appendix I).

As the researcher coded the data, she made use of a separate Word document to annotate the coding decisions made, along with reflections or streams of thought that emerged during the coding process. These formed memos, and computer software helped establish an audit trail by having an electronic record of such memos, initial ideas, and the codes and categories formed (Appendix D).

Quotations

Alongside the practice of keeping memos, which served as reminders of what generated a concept or idea (Corbin & Strauss, 2015), quotes captured participants' views and provided a representation in their own words (Patton, 2014). In line with GT, the aim of the research was to develop concepts to represent comprehensive understandings of experiences (Glaser, 1978), with the "life-world" of people aiming to be captured as parts constituting a whole, as opposed to dividing or fragmenting experiences (Ricoeur, 1992). This may suggest against the use of quotations in that the conceptual nature of findings are indicative of the need to speak for themselves (Glaser & Strauss, 1967). Charmaz (2015) however recommends the use of detailed interview quotes to enhance accessibility of the conceptual analysis to a wider audience. The purposeful application of quotations as a cohesive unit (Sandelowski & Barroso, 2002) is therefore used in the results chapter to further illustrate the crafted categories, connect the theoretical relationships, and underscore the rigour of the methodology (Eldh et al., 2020). Interpolation to clarify specific terminology or phrases is provided, with confidentiality considered by redaction of potentially identifying contextual information, and ellipsis inserted in place of omitted text.

Stage one: Initial coding

Initial coding, or synonymously named *open coding* by Glaser (1978), is the first step of data analysis in GT. This was used to fracture the data and "compare incident with

incident, name apparent phenomena or beginning patterns and begin the process of comparison between the codes applied” (Birks & Mills, 2015, p.92). Initial coding is a particularly reflexive activity, with the researcher employing continual self-interrogation about the analytical decisions made (Strauss & Corbin, 1990). Rather than extracting data line-by-line, short segments of data were analysed; deemed superior in this instance because of greater examination to minute detail and the ability to ask questions of the data (Huberty et al., 2008). Appendix J provides an example transcript, illustrating data analysis during the initial coding stage.

Stage two: Focused coding

Whilst initial coding fractured the data, the second stage of *focused coding* (Charmaz, 2006) reconnected the data in a more conceptually abstract manner (Birks & Mills, 2015), which involved generating codes around broader categories. These codes then directed subsequent analysis, enabling the researcher to form categories and identify explanatory patterns (Charmaz, 2006), with properties further delineating and defining the categories (Strauss & Corbin, 1998). Appendix I illustrates categories generated at the stage of focused coding.

Stage three: Theoretical coding

The substantive codes were then organised and integrated into higher order conceptual categories to form an abstract GT, theoretically directing the analytical story (Charmaz, 2014) to “weave the fractured story back together” (Glaser, 1978, p.72). Conditions and consequences linked the categories derived from the data and a GT was produced in the form of a “conceptually abstract narrative” (Holton, 2007, p.285) with the aim of applying to those involved in the specific phenomenon studied (Corbin & Strauss, 2015). Heterogeneity in participant characteristics resulted in some interview content deemed

contrary to codes generated from other interviews, referred to as *negative cases* (Morse, 2007), which increased the reach and explanatory power of the GT (Strauss & Corbin, 1998) and added depth to the data and further dimension to the developing theory (Charmaz, 2014). Explanatory or predictive power is required of a theory (Hallberg, 2006), meaning that causal conditions were identified that linked subcategories to categories, “while emphasising their contextual and contingent nature” (McCall & Edwards, 2021, p.98), in line with constructivist GT (Charmaz, 2014). Categories were illustrated in the form of a diagram, described as central in GT work, both from the perspective of linking memos and the evolving of ideas from earlier stages, but also presenting the final theory as an integrated story (Lempert, 2007). Examples of diagrams generated from theoretical coding stages are illustrated in Figures D3-D5.

Ethics

Ethical approval

Ethical approval was granted by the University of Essex in October 2023, with an amendment approved in April 2024 from altering the framing of the research question based on feedback, as detailed earlier in the chapter (Appendix K). MoD ethical approval was not needed for various reasons: researching veterans rather than active personnel, being funded by the university rather than the MoD, no comparisons to serving personnel, and no use of MoD services, sites, or property (MoD, 2024). Ethical approval was granted before data collection commenced, with research overall conducted in accordance with the British Psychological Society Code of Human Research Ethics (British Psychological Society, 2021).

Informed consent

Participants were provided with a Participant Information Sheet, presented in condensed form for accessibility reasons. This then led to the consent form via Qualtrics

where participants provided written consent, with participants also provided with the full Participant Information Sheet (Appendix L) when the researcher entered into correspondence via email following submitting their questionnaire. Along with an oral consent script used at the beginning of the interview (Appendix M), participants were provided the opportunity to ask questions at any stage during the interview process.

Confidentiality

Information about how data would be stored was given to participants in the form of the information sheet and reiteration of oral consent at the beginning of the interview. Participants were also informed about how their data would be anonymised, including allocation of pseudonyms. Whilst there are different methods for allocating pseudonyms to participants (Heaton, 2022), participants were referred to by a name in ascending alphabetical order in the order in which they were interviewed. British pseudonyms were chosen for all participants on the basis that this was the nationality marked by most participants, and that deviation from this may have compromised confidentiality (Kaiser, 2012). The researcher meticulously went through each transcript to clean the data and either change or redact references to any other identifiable information, such as locations or specific deployments undertaken.

All interviews were conducted solely by the researcher. Both online and in-person interviews were recorded on Microsoft Teams and saved on a password-protected computer on secure university servers. As soon as transcripts were generated from the recordings and manually checked for accuracy, the recording was deleted. Participants were informed that the researcher and her supervisor would have access to the anonymised transcripts, with these remaining in the university repository following study completion for future researchers' use upon request.

Risk of harm

The interviews spanned a range of topics, including experience of participants' physical and/or mental health difficulty, prior adverse experiences, and transitional experiences in the civilian world. As these could be sensitive topics, participants were reminded at the beginning of the interview that they could opt out of any question, have a break during the interview, or withdraw from the interview, without giving a reason. The researcher used her clinical experience as a trainee clinical psychologist and prior experiences working in mental health settings to navigate the topics gently and sensitively. Participants were also provided with a signposting sheet after the interview, which contained information about support services (Appendix N) and further information available upon request; for example, one participant was directed to their local NHS Op Courage service. Whilst most interviews were conducted online, the researcher met three participants in-person for their interview at the University of Essex. Risk management procedures were followed, including adherence to both the university safeguarding policy and lone working policy.

Methodological rigour

Due to the distinct ontological and epistemological underpinnings of qualitative research compared to quantitative research (Willig, 2012), criteria that were unique to the qualitative research paradigm were reviewed for use in the current study, including methodological strategies such as an audit trail, peer debriefing, and memo-writing (Glaser, 1978; Guba & Lincoln, 1994; Morse et al., 2002).

Quality of the grounded theory

Quality criteria focusing on credibility and applicability proposed by Glaser and Strauss (1967) were followed to ensure sufficient rigour. These are highlighted in Table 3 in terms of how they have been applied to the current GT study.

Table 3

Glaser and Strauss (1967) criteria for ensuring credibility and applicability in the GT. Taken from Charmaz & Thornberg (2021), p.314

Credibility criteria	Application to the current study
“A detailed and vivid description of data so readers feel that they have been in the field as well and literally can see and hear the participants”	Careful description of the conditions, categories and subcategories are provided, along with links between them, aided by direct quotations from participants.
“Readers’ assessments of how the researchers came to their conclusions (what are the data and how have they been gathered and analysed?)”	A detailed explanation of the analysis method is provided, along with relational statements linking categories to each other. Memos, diagrams, and post-interview reflections can be found in Appendix D.
“Multiple comparison groups to increase the scope and generality of the theory, and to correct and adjust the emerging theory to diverse conditions”	Data were analysed as they were collected, in line with theoretical sampling. The study yielded a diverse sample, and negative cases were incorporated into the theory to inform the conditions.
Applicability criteria	Application to the current study
Fitness – “The theory must fit the substantive area to which it will be applied”	The theory and conditions generated are intended to be applied to the population studied (those with military experience).
Understanding – “The theory should make sense and be understandable to non-researchers working or living in the substantive area”	The theory is diagrammatically represented and detailed in the form of summary statements to ensure accessibility to non-experts in the research area.
Generality – “The theory must be sufficiently general to increase its applicability”	The categories were made sufficiently abstract to ensure that the theory is “a general guide to multi-conditional, ever-changing daily situations” (Glaser & Strauss, 1967, p.242), applicable to different

Applicability criteria	Application to the current study
	roles and regiments in the military.
Control – “The theory should help the users to understand and analyse their social reality, to include enough explanatory power on what is going on in situations and how to bring about change in them”	The theory illustrates and explains the conditions under which a phenomenon may occur for those who have had military experience.

Audit trail

The audit trail (Appendix D) consisted of a “systematically maintained documentation system” (Schwandt, 2014, p.10), including memos, diagrams, and reflective summaries of why decisions were made at each step of the process, enhancing the rigour and transparency of the research (Bowen, 2009). Maintaining the audit trail was therefore key to the constant comparison element of GT, where new data were constantly compared with previous data (Chiovitti & Piran, 2003), so there needed to be means of ensuring that coding decisions made could be traced back to the data. For example, themes found during theoretical coding of the first iteration included body image cognitions, attachment to exercise, and high self-expectations (Figures D2 and Table D1). These were developed further in the next round to comprise a “3x3” diagram (Figures D3 and D4), which developed into the eventual theory (Figure D6). The researcher also initially conceptualised an idea of categorising participants based on “clinical-ness” (Figure D1), which evolved to the development of conditions in the theory (Figure D5).

Peer debriefing

The researcher consulted with her supervisor and colleagues at the Grounded Theory Institute at regular intervals during the coding process, which comprised an unbiased way of

evaluating the process as a method of increasing credibility (Janesick, 2015). This was prioritised over member checking, considered to be redundant as a source of verification for GT (Charmaz, 2006) as rather than providing an accurate representation of lived experiences, the aim of GT is to construct a “highly conceptual theorization of process, apparent in relation to a particular substantive area of enquiry” (Birks & Mills, 2015, p.97).

Memo writing

As detailed above and provided in Appendix D, this refers to the “theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding” (Glaser, 1978, p.83); overall, recording the meaning of any conceptual ideas gleaned, and recording ideas for theoretical sampling, so the theory can be developed and formulated (Lazenbatt & Elliott, 2005).

Dissemination

Following completion of this thesis and the DClinPsych programme, the study can be accessed via the University of Essex repository. The participants will be provided with a written summary of the thesis, as well as the original copy. The written summary will also be made available to stakeholders relevant to veteran support and post-military care, with an oral presentation offered if appropriate. The researcher will consider attending a veteran support group to enquire as to the most appropriate method of dissemination. Visual interpretations of findings have been shown to be particularly valuable, with research showing that graphic representations and infographics can significantly increase effect (Ross-Hellauer et al., 2020). The research also aims to be submitted for journal publication, such as the Journal of Veterans Studies, the Journal of Military and Veterans’ Health, the Journal of Rehabilitation Research & Development, the Journal of Applied Sport Psychology, and The British Psychological Society Clinical Psychology Forum. Disseminating the research as preprints

prior to journal submission may also be a method of increasing impact, so that findings are available earlier for sharing (Shuai et al., 2012). An abstract will also be submitted to the Annual Veterans' Mental Health Conference 2026 for consideration. Overall, the process of dissemination will be assessed consistently, evaluating whether it is having the right impact and if any strategies need to be altered.

Results

Chapter overview

This chapter presents the results of the research, beginning with a description of the sample including demographic characteristics and characteristics relating to military service, carefully framed to preserve confidentiality. Delineation of the grounded theory follows, comprising an overview of the data and the theoretical framework, followed by description of the overarching categories, categories, and subcategories, along with the patterns between these and the conditions under which they can be applied. Such descriptions are aided by quotations, with Appendix D demonstrating the audit trail illustrating the researcher's journey to the eventual theory, through provision of examples of diagrams, post-interview reflections, and the accumulated bank of analytical memos.

Sample

A total of 18 veterans participated in the research, with participant demographics presented in Table 4 and military characteristics outlined in Table 5. Along with redaction of identifying information throughout the transcripts, British pseudonyms were allocated for all participants in ascending alphabetical order. Considering participants provided information about their time in service and other contextual identifiers, extra precautions were taken in maintaining respondent confidentiality. Unique combinations of traits and contextual identifiers in the participants' lives may have led to deductive disclosure (Kaiser, 2012), along with stigmatising traits such as drug addiction. For this reason, information displayed in Tables 4 and 5 is provided in a summary format.

Table 4*Frequency table illustrating participant demographics*

Demographic		Frequency (n)
Year born	1960-1969	2
	1970-1979	2
	1980-1989	5
	1990-1999	8
	2000 onwards	1
Ethnicity	White British/English/Irish	17
	Other: British Venezuelan Jewish	1
Religion	Christian	7
	Jewish	1
	None	10
Sexual orientation	Heterosexual	16
	Bisexual	2
Area of the UK	Scotland	1
	South-East	8
	South	1
	East	8
Marital status	Single, never married	9
	Single, was married	1
	Married/registered same-sex partnership	5
	Separated	2
	Engaged	1
Highest level of education	No formal qualifications	1
	Secondary school (GCSEs)	1
	Further education	7
	Apprenticeship	1
	Bachelor's degree	5
	Master's degree	2
	Other vocational or work-related qualifications	1

Demographic		Frequency (n)
Employment status	Employed full-time	13
	Self-employed	3
	Looking for work	1
	Disabled, unable to work	1
Annual household income	£20,001 to £30,000	2
	£30,001 to £40,000	3
	£40,001 to £50,000	3
	Above £50,001	9
	Prefer not to say	1

Table 5

Participant characteristics related to military experience, physical exercise participation, and physical and/or mental health difficulties

Participant	Time spent in military	Year left	Branch of military	Rank	Frequency of physical exercise (weekly)	Type of physical exercise	Physical exercise participation before, during, or after time in service	Physical and/or mental health difficulty description
Adam	5 years	2022	British Army	Team commander	1-2	Weightlifting, marathon training	During, after	Knee injury
Brian	10 years	2002	British Army	Gunner	5-6	Weightlifting, bodybuilding, strength training	Before, during, after	Above knee amputee and complex post-traumatic stress disorder
Charlie	5 years	2024	British Army	Trooper (private)	3-4	Rock climbing, swimming, weightlifting, cardio	Before, during, after	Hip injury, mental health difficulties
David	5 years	2023	British Army	Lance corporal	5-6	Strength training, occasional cardio	Before, during, after	Knees injury, back, generalised anxiety disorder

Participant	Time spent in military	Year left	Branch of military	Rank	Frequency of physical exercise (weekly)	Type of physical exercise	Physical exercise participation before, during, or after time in service	Physical and/or mental health difficulty description
Eddie	5 years, 11 months	2023	British Army	Corporal	5-6	Muay Thai, gym, calisthenics	Before, during, after	Adjustment disorder, lower back pain
Frankie	5 years	2016	British Army	Lance corporal	3-4	Bouldering, running, general gym work	Before, during, after	Lower limb injuries and back issues
George	4 years	2016	British Army (Royal Engineers)	Lance corporal	5-6	Running, swimming, gym workouts, tabbing, football	Before, during, after	Borderline personality disorder, depression, shin, thigh and shoulder injuries
Harvey	8 years	2023	British Army	Captain	5-6	Cardio (cycling, running), weights (circuits or weightlifting)	Before, during, after	Knee injury
Ian	4.5 years	2008	British Army	Gunner	5-6	Running, weights	Before, during, after	Mild injuries, never serious
Jack	9 years	2023	British Army	Private	3-4	Circuits, runs, cycling, weights	During, after	Knee injuries

Participant	Time spent in military	Year left	Branch of military	Rank	Frequency of physical exercise (weekly)	Type of physical exercise	Physical exercise participation before, during, or after time in service	Physical and/or mental health difficulty description
Kevin	14 years	2022	Royal Air Force	Private	7	Weightlifting, Brazilian Jiu Jitsu	Before, during, after	Head injury, depression
Luke	43 years	2022	Royal Marines	Warrant officer	5-6	Running, weights, HIIT	Before, during, after	Knee injuries
Mike	Just under 7 years	2024	British Army	Trooper	1-2	Physio exercises (previously did running, weights, tabbing, etc.)	Before, during	Hip injuries, mental health difficulties (depression)
Nate	4 years	2012	British Army (Royal Engineers)	Sapper	3-4	Swimming, gym	During, after	Depression
Oscar	7 years	2022	Royal Air Force	Flight lieutenant	3-4	Circuits, weight training, spinning, swimming, running	Before, during, after	Depression, anxiety, on the ADHD pathway

Participant	Time spent in military	Year left	Branch of military	Rank	Frequency of physical exercise (weekly)	Type of physical exercise	Physical exercise participation before, during, or after time in service	Physical and/or mental health difficulty description
Paddy	11 years	2009	British Army	Corporal	5-6	General PT, gym, rugby training, playing	Before, during, after	Depression, PTSD, neck, back and knee issues
Quentin	14 years	2024	British Army	Sergeant	5-6	Running, yoga, weight training – used to do rugby and rowing	Before, during	Long COVID
Ryan	22 years	2009	British Army	Warrant Officer Class 2	7	Walking	During, after	Service-related injuries to knee, lower back

All participants identified as male, all but one as white British/Irish, and year of birth ranged from 1961 to 2001, with ages at the time of participating in the interview 24 to 63. All participants had varied ranks, and the majority served in the British Army, with the length of service ranging from four years to 43 years. The length of time as a veteran also varied; 11 out of the 18 participants had left the military since 2022, and others had more distance since their time in the military; three left between 8-12 years ago, and a further four left between 15-22 years ago. Most participants' use of physical exercise was regular and frequent even before joining the military, with varied types of exercise participation 3-6 times a week (Table 5). Most participants had physical injuries arising from service, such as knee injuries requiring surgery, lower limb injuries, back pain, and above the knee amputation. Only two participants stated solely mental health difficulties, and eight identified both physical and mental health difficulties; the latter of which included diagnoses of generalised anxiety disorder, complex post-traumatic stress disorder, borderline personality disorder, depression, and adjustment disorder; all of which varied in terms of the duration and onset being before, during, and/or after their time in service. Physical injury was stated as the primary reason for leaving the military in seven cases, with physical difficulties a secondary reason for leaving in four cases.

Regarding motivations for joining the military, some participants shared that they always knew they wanted to join and therefore did so at the earliest opportunity (Charlie, Eddie, Harvey, Luke, Mike); other participants shared that their decision to join was more due to chance, such as Frankie who “flipped a coin”, and George whose father “grabbed [him] around the ear” and pushed him to join. Some had said that they had always wondered about joining and so did so at a slightly later age (Ian, Quentin), or having had nothing else to do (Nate, Paddy). For others, joining the military appeared to be an escape from what was

otherwise a difficult home environment, for example an abusive household or homelessness (Brian, Kevin), struggling with drug addiction (Jack), or struggling at school due to dyscalculia and dyslexia, and subsequently getting into trouble at football matches (Ryan). Most participants had multiple reasons for leaving the military, which included injuries or illness that culminated in medical discharge for some (Adam, Brian, Charlie, Eddie, Harvey, Kevin, Mike, Quentin), their time “naturally coming to an end” (George, Ian, Jack, Luke, Ryan), struggling with the military culture (Charlie, Paddy), remuneration packages (Harvey, Oscar), and the incongruence with desires to settle down and have a family (Harvey, Oscar).

In line with GT stipulations, sampling initially began as purposive and inclusion criteria were consistent throughout, prioritising theoretical sampling to provide richness and saturation of the emerging categories, as opposed to variation in the population characteristics. Although certain demographics were consistent across the sample, such as ethnicity and sexual orientation, there was variation in other elements of the sample. As stated above, participants consisted of four different generations (born between 1961-2001), with some having left the military more recently than others; the type of physical and/or mental health difficulty reported also varied. Although not informed by purposive sampling, such heterogeneity of the sample strengthens the rigour of the eventual theory developed (Charmaz, 2014), with the conditions generalisable and robust across a wide range of people in the UK with military experience, rather than being limited to specific populations within the military, such as subcultures within regiments, certain generations, or duration of service.

The grounded theory

The current study aimed to explore the mechanisms underlying physical exercise participation in male military veterans in the UK, with particular focus on the possible role of body image and masculinity ideologies. The broad GT-informed approach taken to the

interview guide meant that the final theory is represented as a timeline of identity formation and transitional experiences, in light of exercise participation fashioning the physical self and identity. Figure 4 constitutes the diagrammatically represented final theoretical integration, with acknowledgement of macro-level influences (i.e., cultural and social norms) within the categories (Lempert, 2007). The first overarching category of “formative experiences pre-military” postulates three conditions comprising participants’ earlier experiences (experiences and values prompting enlistment, earlier body awareness, and elevated pressure from a young age), that influenced the degree to which they associated with the military identity (differing degrees of desiring to embody aspects of being a soldier, including the appearance and physicality of a soldier, and embracing the camaraderie and family-based culture). This also differed according to different regiments and units due to varied exercise requirements, specific responsibilities, and the degree to which participants identified with masculinity ideologies.

Varying association with the “formation of the military-masculine identity” overarching category, combined with the conditions under the “formative experiences pre-military” overarching category, along with the circumstances upon exit, all affected the ongoing association with the military identity in the civilian world, and degree to which veterans experienced elements of both normative and non-normative transitions. This resulted in varying degrees of how the veterans internalised the “military ideal”, where physical exercise appeared to centre around maintaining a military identity: preserving their prime physical body, ensuring they can still hold themselves to the same high military standards, proving themselves to others, and both retaining and building social connections, which appeared to mirror the military-like camaraderie. Spanning all three overarching categories and discussed within the individual categories are two macro-level influences: masculinity

ideologies, and stereotypes and assumptions about military veterans. Many participants also shared that accessing professional help or having increased time to reflect on their experiences had resulted in greater introspection and realisations about their experiences, both within the military and the civilian worlds. Figure 5 provides two examples illustrating how differential meeting of the earlier conditions influenced the degree of association with the military-masculine identity and transitional experiences; in line with constructivist GT however, maintaining emphasis on other contextual factors (e.g., regiment and personality differences, circumstances around discharge), as illustrated in Figure 4.

Figure 4

The final theoretical model of the grounded theory

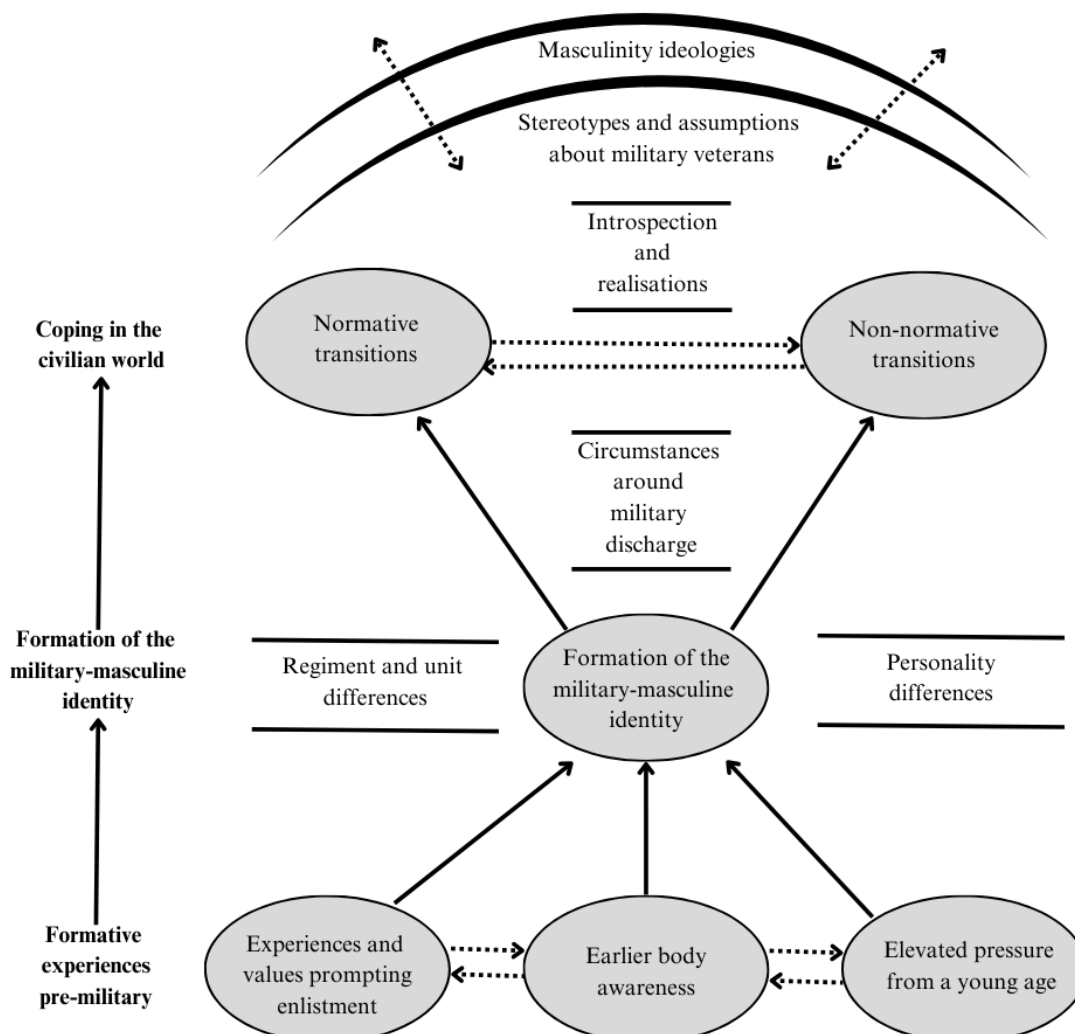
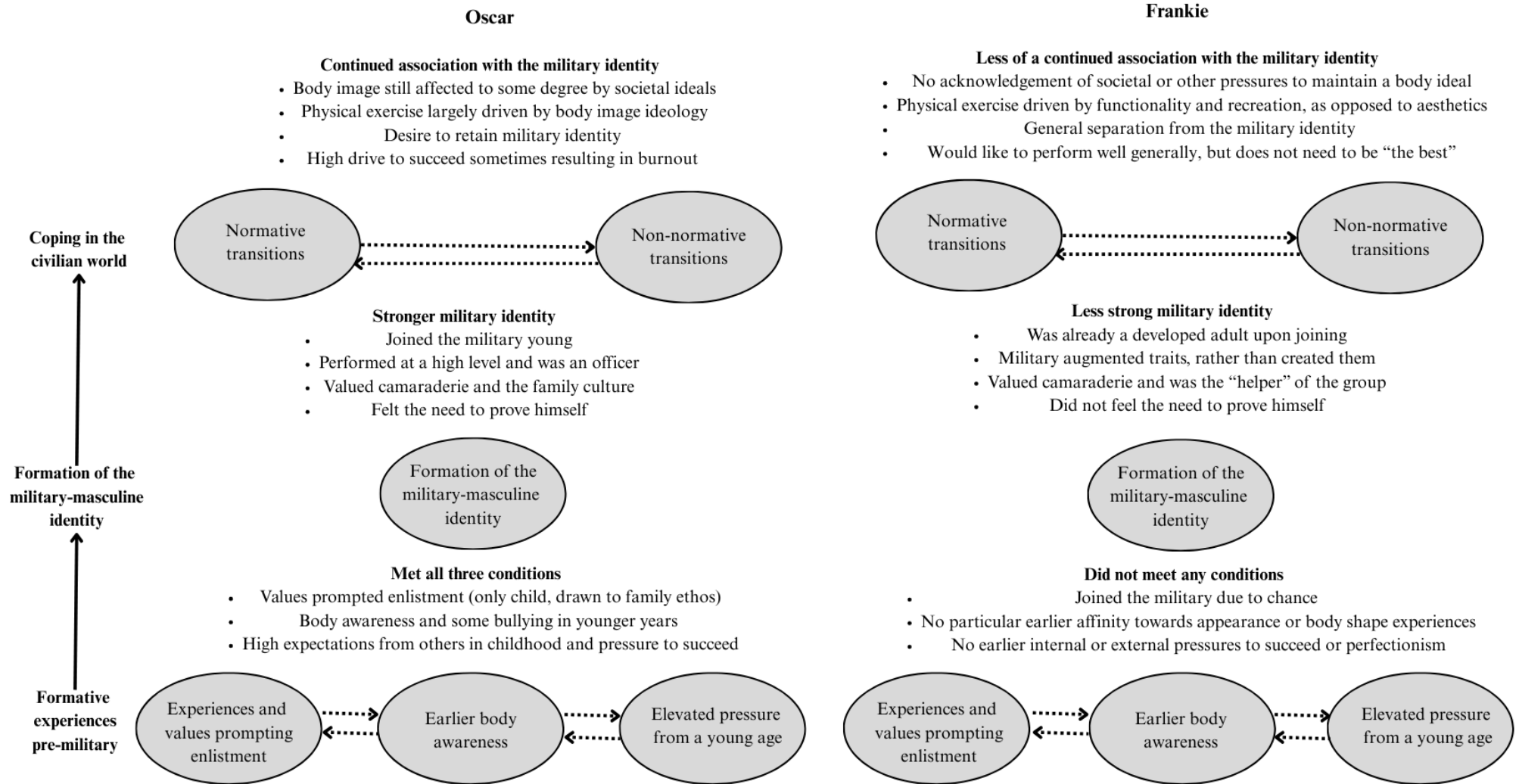


Figure 5

Diagram illustrating two examples of how differential meeting of conditions appeared to result in different experiences



Overarching categories, categories, and subcategories

As shown in Figure 4, the theory is made up of different categories at three sequential points on a timeline, represented as the formative experiences pre-military that appeared to affect association with the military-masculine identity and subsequent transition experiences in the civilian world. Table 6 illustrates the categories and their corresponding subcategories, with further description of the subcategories below, supported by quotations.

Table 6

Overarching categories, categories, and subcategories

Overarching category	Category	Subcategory
Formative experiences pre-military	Experiences and values prompting enlistment	Protection from earlier experiences in the green kit
		Embracing the outdoor, active lifestyle
	Earlier body awareness	Adverse experiences with body image Differing aesthetic motivations from a young age
Formation of the military-masculine identity	Elevated pressure from a young age	“Tearing you down to build you back up”
		Acceptance within the new family
		Representing the physical aspect of being a soldier
		The deep desire to perform well as a soldier and as a man
		The darker side of the military
Coping in the civilian world	Normative transitions	Societal physical military ideals
		Physical exercise driving appearance ideals
		Retaining the military identity
		Drive to help others

Overarching category	Category	Subcategory
Coping in the civilian world	Non-normative transitions	Motivation to achieve more
		Separation from the military identity
		Coping with a contrasting civilian world
		External validation
		Amending expectations

Formative experiences pre-military

The first overarching category forms the first timepoint of the theory, encapsulating the three possible conditions occurring during participants' formative experiences.

Experiences and values prompting enlistment

Protection from earlier experiences in the green kit. Some participants shared earlier adverse experiences that included trauma, abuse, homelessness, and drug use, with the military positioned as an escape or providing both shelter and employment. Such experiences appeared to connect to having a lack of identity earlier in life and therefore “finding” an identity in the military. Brian, who experienced bullying at home, shared a sense of feeling protected and untouchable in the “green kit” and that he was joining a “joint family”. The connection between adverse prior experiences and ascertaining a sense of identity was illustrated by Kevin:

I was in and out of homelessness as a teenager. So when I got to 16, my Mum went, you need to get out of this house. And I was like, I don't have anywhere to stay. And she was like, I, I don't care. So I left ... when I got [to the military], they said, where's your dad? And I was like, he's in prison. Where's your mum? I mean, she doesn't care. And then they were like, you'll be a paratrooper. And like, yeah, just went to join the military for that.

Kevin shared that other people he lived with in the military had similar experiences, with another soldier sharing that “[his] mum and sister were prostitutes. And [he] grew up in the whorehouse”, asserting that childhood trauma and poverty were commonplace in soldiers and such “childhood trauma becomes a motivation for proving themselves”. Jack also shared that he joined the military to put an end to his drug use, to which he referred as an “escape”, and Oscar, who as an only child, suggested that “subconsciously [he] was just looking for an organisation bigger than [him]self to provide a family home [he] never had”. Ryan also shared that he was “given a second chance” when he joined the army, having struggled with dyslexia and dyscalculia at school and had externalised as misbehaviour.

Embracing the outdoor, active lifestyle. Motivations for joining the military in other cases appeared to be more values-driven; Harvey shared that he wanted to do something outdoor, adventure-like and team-focused, and Luke discussed motivations for joining stemming from primarily travel, and that being “very much into fitness” at school appeared to bode well with joining the military, sentiments of which appeared to be shared by other peers. Ian shared that he was in admiration at the sense of community in the military and “the way these guys held each other in high regard and the friendship and camaraderie they had”. He also reflected on his love for physical training when younger and how this attracted him to having a “mostly physical” role, both whilst in the military, and in his current job as a personal trainer. Similarly, other participants did not necessarily position the military as an escape but as a possible “filler” having had nothing else to do (George, Nate, Paddy); others shared that they had always set their sights on joining (Ian, Quentin).

Earlier body awareness

Adverse experiences with body image. Many participants spoke about awareness of their body from a young age, whether this was manifested in the form of bullying from peers,

or simply increased cognisance of their appearance. Brian shared that he was “bullied as [he] was short”, and Oscar recalled being “known as ‘Moobs’ for a bit”, and although subsequently lost weight, was still unhappy with his appearance. His continued critique of his weight continued into adulthood: “I was always in the forwards ... the slightly bigger blokes ... I’ve never fit that stupidly muscled physique”. George illustrated longstanding difficulties around his weight, which appear to have been the crux of many difficult experiences:

I’ve been bullied a couple of times about my weight. When I was younger, 'cause like I said, my weight was always fluctuating ... Yeah, it's something I've been aware of and conscious of for as long as my memory goes on ... in primary school, being called fat a lot ... secondary school, same thing. And in year nine ... I ended up actually getting beaten up because of that ... always been something I have been very conscious of.

Whilst others may not have disclosed bullying in childhood, awareness and somewhat critique of their bodies were discussed: “I was a late bloomer in terms of puberty ... very short, very skinny, very scrawny” (Eddie), “I’ve always been short” (Charlie), and “I’ve never been a big guy” (Frankie). Harvey shared that “before [he] got into the army [he] was classified as overweight”, to which he referred as embarrassing. David referred to himself as a “big guy” who can typically gain weight easily, and consequently regularly went on dieting and exercise cycles to manipulate his weight.

Differing aesthetic motivations from a young age. Many participants spoke about aesthetic motivations from an early age. Ian recalled at the age of 14 “reading the Mr Olympia magazine ... [he] was not putting on any mass ... told because you’ve got low testosterone (laughs)”. Similarly, Luke shared the following:

We used to go down to the to the youth club and do weight training sessions, you know, and that was, at the age of probably 13, 14, 15, you know, and everybody wanted to look pretty good, you know, for the for the girls and things like that.

Paddy shared that when he was younger, he was aware of his size and there was a competitive culture within his adolescence; when referencing others in his friendship group comparing muscular attributes: “You could see his abs, but he's got a proper six-pack and I've managed to get up to 22 inch biceps. I reckon I could get past 23 and yeah, there was definitely that sort of thing”. Paddy went on to share a change of mindset that since then and coming into adulthood, he has never been particularly “body conscious”. There were similar resonations across other participants who could not recall relegating importance towards how they looked; for example, “I’ve never had any body image issues or any thought of it really” (Nate), with appearance “not a primary driving factor” (Frankie), “in terms of having huge bulging muscles I’m not bothered about that” (Jack), and “I’ve never cared about that [aesthetic motivations] type of stuff, I’ve never cared about looking big or looking strong” (Mike). Ryan admitted “[carrying] a little bit [of weight]”, but that it served him well for playing rugby. Participants who disclosed bullying or increased awareness of their weight in childhood appeared to have ongoing struggles with their weight and body image into adulthood, with facets of their military identity appearing to rest on their outward appearance, as illustrated by subcategories within the “formation of the military-masculine identity” category.

Elevated pressure from a young age

Many participants shared being driven and having high standards from a young age; for example, “I am very driven, I’d say. And I like to succeed in whatever I’m doing” (Adam), “I always wanted to do well in everything I did” (Mike), and “I always had quite a

good work ethic” (Jack), insinuating that such qualities placed them in good stead to enter the demanding, pressured environment of the military. Brian similarly shared characteristics reflective of the military environment: “I can’t make it easy on myself. I have to push myself to the limit all the time. Otherwise I’m not happy.” Some participants shared specifically choosing the hardest entrance standards to train for: “I trained using the Royal Marines standards, knowing I was going into a non-combat Army unit” (Eddie), with similar aspirations in others with joining what was viewed as the most challenging service: “The Royal Marines would be ideal. It was one of the hardest ones to join. So that was what swayed me to enter” (Luke).

This also translated to high sporting standards before joining as a child, for example, playing professional ice hockey (Mike) and rugby at a high level (Paddy, Quentin). Even participants who said they were not as competitive shared a sense of still wanting to be “above average in most things” (Frankie). Such pressure also seemed to be placed on participants externally; Mike shared pressures from his parents to “do better” at school, with Oscar’s father an “Oxford scholarship boy”, meaning that he was consequently held to a similar expectation from his parents, resulting in perfectionism being “a problem that [he has] always fought with”. Some participants shared that the military augmented pre-existing traits, rather than creating them (Oscar, Quentin); others shared that there were certain traits not necessarily present beforehand (Luke, Nate). For example, Paddy shared many military traits in childhood from growing up in a military family, and Mike shared that he “always wanted to help people when [he] was younger”. Oscar shared that he “always knew [he] was going to join as an officer”.

Formation of the military-masculine identity

As the second timepoint in the theory, this overarching category describes the formation, cultivation and maintenance of the military, masculine identity, and the embodied nature of being part of the military culture. This was felt as a product of numerous factors illustrated by the following subcategories, all experienced to differing degrees depending on whether they had met an earlier condition. For example, those who disclosed elevated pressures from a young age appeared to have a greater desire to align with and embody the soldier ideal.

“Tearing you down to build you back up”

This subcategory encompassed the creation or discovery of a new identity within the military. Some participants shared a common theme of the military refashioning them to fit a certain mould: “Soldiers are made to feel pretty inferior by the definition of training and [the Army] builds [them] back up” (Harvey), and “It’s an old adage of the army, the sort of the, tear you down to build you back up again” (Paddy). Such sentiments were echoed by both Frankie and Ryan, who shared the uniqueness of the military in merging people from differing walks of life onto equal footing for the purpose of working as a close team. Many participants shared the all-consuming nature of the military: “The army is your everything when you’re in it” (Brian), “the military is very good at giving you an identity. It’s you are a soldier, soldier you are” (Eddie), and “the guy in there said you need to sell your soul to the military ... it was almost like a secret society” (Ian). Some participants shared that there was an expectation to always “act like a soldier”; Oscar referred to “a lot of fronting” in the military, and Eddie shared that “when you’re joining the military, you’re you feel like you have to act in a certain way because you want to be perceived a certain way”. There was also a sense of the military improving self-esteem, as George discussed:

I think joining the army made me realise, erm... like, who I was to a degree and like sort of allowed me to express myself a bit better and have a lot more confidence about who I was.

Mike shared that having a sense of purpose was one of the main attractions for him in joining the military, with Adam echoing this sentiment, sharing that he “completely believe[s] in what [he] was doing when [he] was in the Army”. This may have been supplemented by having “a lot of responsibility put on people’s shoulders at generally a fairly young age” (Oscar), contributing to the sense of solidifying the military identity, implying the level of belief of the military in its soldiers to be assigning such responsibility. Mike suggested differences within his regiment about identification with the military identity: “You can always tell the difference between someone that wants to be there and someone that is just there because it's a steady income.” Finding the military identity was not instant however for many people, as illustrated by Paddy:

It probably took about a good two or three years I'd say, for me to say that I felt like a soldier, that I felt as though, right, I belong now. And actually go on exercise and show people that, yeah, I could do this. And you know what? I'm actually quite good at it.

Acceptance within the new family

The military was viewed and experienced by many participants as a family, offering reassurance, protection, togetherness, and solidarity with others: “Other people around you will build you up” (Luke), “you’ve got a really good support network” (Nate), “I was never lonely in the military” (Oscar), and “you start to make those different kinds of bonds with people” (Paddy). A key theme was the fear about “letting down the person next to [them]”

(Frankie), feeling “tied to each other” (Ryan), with everyone being “a cog in the machine ... putting your people before yourself is just something that you're expected to do” (Oscar).

Participants also spoke about acceptance, with the military non-judgemental and the freedom to be as they please: “It's one of the most open places that I think exist” (Jack). Brian shared that finding a family in the military made him feel protected:

A joint family, you know, by it makes you think that you you're not going to get as much, or if any stick like I did when I was younger ... or problems off people, but if you did, you've always got other people there to back you up.

Physical exercise in the military was viewed by many participants as a way of forming and maintaining connections, valuing the teamwork nature associated with exercise. Harvey shared that his “strongest connections with people socially have in some way shape or form involved physical training”, and that although his training is currently more solitary, a similar physiological effect remains in that his body has been “conditioned because [he] felt better for it by being around [his] friends”. It appeared that going through intense physical training as a team solidified connection, with such solidarity referred to by Frankie as “shared suffering” or “trauma bonding”; overall, creating lasting ties: “I had a lot of friends and peers that I would say are probably some of my best friends today from that time because of the intensity of that” (Harvey). Being part of such a tight knit group however did sometimes cause tension when, for example, injury caused opting out of physical training and as a result feeling othered from the group: “Because he hasn't been doing anything, he's sort of like shunned as such ... it creates a real divide” (Jack), which appeared to be attributed to someone being “missing during the shared experiences” (Ryan).

Differentiating from other services in the military was also a key part in attachment to a military identity; Kevin admitted that some arrogance may have been at play after having

served for several years in the RAF: “Like, we're paratroopers. You're all s**t. And we're all amazing, obviously”. Such a strong sense of loyal community within their regiment however resulted in some participants feeling “stuck” in their unit. Kevin shared that he was told that going on SAS selection “will have a negative effect on [his] promotion”, with Mike unable to join a cadre in another regiment. The sense of being impermeable and firmly held their unit and regiment was resounded by the statement by Frankie: “This is who we are. You’re one of us. Therefore this is who you are.”

Representing the physical aspect of being a soldier

For many participants, it appeared as though their body naturally changed as a byproduct of being in the military; some spoke about it being part of the job description to be fit and therefore look as such: “I am a soldier. I am paid to be fit. Therefore I’m going to make sure that I am” (Eddie), and “you join the Royal Marines, you should look good and you should be fighting fit” (Luke). Participants spoke about pressures to attain a “military shape” (David), which precipitated joining the military: “I started going to the gym a lot more when I was 16, 17, 18, to lose the weight to focus on getting to the military and stuff” (Oscar). Although there appeared a consensus that participants did not feel pressured to maintain such a shape in the military, physical appearance was linked to high standards imposed upon the physical self in many cases. Mike shared that “anyone that looked overweight was pressured to not look overweight regardless of how good they were”, with Harvey sharing that his weight was “almost addressed for [him] by the standard [they] had to achieve”, indicating that the military unintentionally or indirectly regulated the pre-existing body image difficulties. Ian described joining the military as a “culture shock”, suggesting that the body would generally undergo significant change based upon the physical exercise requirements. Nate shared that his body became “broader”, and Ian described the soldier as

another form of body shape to aspire to: “I replace one God for another, replace Mr Olympia with the British soldier.”

The desire to represent a certain “military look” appeared to be more intentional in others; Mike shared that “there's a lot of people in the military who want to look good and look big”, with Paddy echoing this, recalling that “there was a culture of steroid use when [he] was in”. The desire to “lead from the front” was particularly noticeable in the officers of the sample, as demonstrated by Harvey:

Your role as a as an officer and a leader and representing the British Army at large, your regiment in particular, and then even down to your team, that there's a lot of, it is ... how you appear, your physical appearance.

A recurrent theme throughout the interviews was comparison to others, with comparisons made often between body types, for example those who were taller or leaner being stronger at a different type of physical exercise. David shared that he was “by no means the fittest in the pack, but [he] was always strong”, and Paddy appeared to reconcile what he perceived as his physical shortcomings with his strength: “I didn't look as good as some of the some of the other guys with their T-shirts off, but I could deadlift 32 stone whereas they couldn't”. Charlie illustrated this further:

So like I'm short and I was strong. So I look fat, but I used to be bloody good at weightlifting than the people who were tall and slim, they were bloody good at running and then people in between who looked built but weren't necessarily good at either. And it's, I would say that I got made fun of more because of the way I looked, when in reality I was stronger and better at my job than, and better at physical activity,

even with an injury, I was better at physical activity than half the people that didn't look like me that were taller or more slender.

Participants spoke about what could be interpreted as personality-driven jest from peers, such as “yoghurt body” (Harvey) or “BIFF” (Eddie [‘bone idle fat f***]), and that there was a school-like culture of “getting picked last” (Charlie) based on how they looked. Luke similarly shared that “people used to ridicule the perhaps more overweight Royal Marine”. Awareness of their own physical appearance compared to others was common; Nate shared that “[he] really struggled with that [exercise] because [he is] quite a slim build. It was really designed for like, you know, the more rugby sort of build fellows and they could do that easily”.

Competition with others was also a recurrent theme throughout the interviews, with there being “always competition to be fitter, faster” (David), “competing against others and feeling good while you’re doing it” (Luke), and competition “actively encouraged in a positive way” (Quentin). In reference to one of his best friends, Mike recalled the competitive nature of the desire to “lift heavier than [him]”. Luke similarly shared that as one of the younger Royal Marines, he felt a sense of pride at outperforming the older members of his troop who were “more physically formed and were a lot stronger”. Some participants had appeared to make peace with this; for example, Paddy shared that the experience of “meeting people much better and bigger and harder than [he] was” humbled him, and Frankie similarly shared that he is “so long used to not being the fastest or the biggest or the most physically impressive to get around there”.

The deep desire to perform well as a soldier and as a man

Proving themselves as a soldier. Many participants communicated the desire to perform very highly. This appeared to be connected to the pre-existing traits of perfectionism and drive to succeed, along with socialisation in the competitive culture of the military and acceptance within the “new family”. It was acknowledged that the milestones associated with military training are “hard milestones to reach” (Nate), but that overall, “the standard was there to be met” (Mike). The need to continually be of a high standard was communicated across many interviews, with feelings of failure, shame, and embarrassment depicted if participants did not meet these. As such, the need to prove themselves was echoed in many interviews, which resulted in having to regularly “question whether [they are] worthy” and therefore the “level of self-pressure is huge” (Harvey):

If I pass that, I would feel like I'd met a standard set by the army and then that kicks in. The external thing of well, you have proved to your regiment you're worthy to meet a standard, a physical standard, a mental standard, a core standard, whatever that might be, which therefore gave you the, the validation of your unit or your peers or your soldiers.

Ian shared his belief that “you volunteered to be here, you might as well give it your all”, and that “there is a deep desire amongst the high performers in the military to serve and to deliver results” (Eddie). Harvey recalled passing everything until special forces selection, with Luke also sharing the culture of “trying to be the best but not always being the best”, and “there was a sense of wanting to beat yourself as well as others around you”. Exercise was frequently used as a form of pushing themselves but also to strive to perform (Harvey); Eddie, as lead physical training instructor for his battalion, shared that it was a “no compromise” for him to supplement his mandatory fitness with additional exercise. Similarly,

David viewed his overexercise during the military as striving to reach “as close as [he] could get to pure physical exhaustion”:

So the harder I pushed myself, the more, wasn't necessarily the more results that I saw, but the more, the more I felt like I'd done in a session, the more I felt like there was a sense of achievement from that session.

Such feelings appear to have been heightened in officers, where overt pressure was evident to “lead from the front” and be the fittest and most “switched on” (Adam, Oscar). The following excerpt was taken from Mike’s interview:

I was the top performing junior NCO in my department ... when you're in, you're constantly told to hold yourself to the higher standards and you are the best ... I didn't want to be the standard. I wanted to be above the standard ... I was always told, like, well done, you're immaculate.

The military appeared to encourage such behaviour through principles of pushing through pain: “You can’t really stop when you want to stop ... you’d have someone slapping you round the back of the head (laughs) or screaming in your face” (George), and “I know it’s going to hurt regardless, or I’m going to get in trouble” (Charlie). Quentin also shared that despite being instructed otherwise, he has “quite literally broken [him]self a few times, pushing through to exhaustion and damaging [his] body”. Experience of compromised physical or mental health appeared to directly contradict assumptions of being a competent soldier; Eddie shared:

I definitely found it difficult to ask for help. I didn't know I needed help because for me, it was assumed it was kind of. I signed up. I'm a soldier. I'm young, I'm fit. I meet all the criteria to be an effective soldier, and I've always performed well in the

military, I've always been a top third of my cohort, regardless of what course or what, what operation we were doing. I've always consistently done well, always promoted first time. It's like, I didn't, for me, the idea of having mental health problems was kind of like something that happened to other people.

When discussing special forces selection, Kevin shared that “by this point you've been so qualified ... so you're competing with five other very, very, very good high standard soldiers”. When reflecting on whether he would have been satisfied or felt “enough” if he had passed selection:

Because you become a paratrooper and that's what we considered quite a cool thing. And then you get, like, the best at PT, which is then considered quite a cool thing. And then you do, like, one year as a private soldier. And then they say we want to send you on your labs like leadership course. You go on your labs like leadership course or your first strike as the youngest, most inexperienced bloke there. And then you get top student. I'll go and box and I'll get selected for regimental boxing. Then I go and fight in their heavyweight finals. Like at what point like, is it ever enough? You're never satisfied, like there's no end to that.

Paddy similarly shared:

There's always the next level that you could achieve, there's always the next thing to push on for ... you're never gonna hit that self-fulfilment because you're always going to get pulled back down here and then you can go up and up and up and up and then you're always going to go back down there.

In a similar vein, Harvey referred to it being “crippling embarrassing” to fail courses, which seemed to propel the idea of not being good enough, resulting in “reeling from a big

failure of not passing special forces selection”. Kevin was able to reflect on his underlying motivations for special forces selection by way of manifestation of his need for external validation, and that ultimately, his subsequent “failure” of the course was due to his desire to be “the best”:

Selection was more about that validation, more about that somebody love me, somebody tell me that I'm good. Somebody tell me that I'm a great guy. Somebody tell me that. I never, I never experienced any of that, like all I wanted to do was like I want to be the meanest, I want to be the toughest, somebody – it's a cry for love ... ultimately that's what caused me to fail the course because I was, I was like, sprinting from like checkpoint to checkpoint. Like every shoot I had to be the best. Every fitness, I had to be the best. You're fit enough to pass the hills, mate. Nobody's doubting that. You're not, there's no prize for being the fastest.

He shared that although fearing that what he viewed as failure had reinforced beliefs formed in childhood about not being “good enough”, passing the course may have “solidified that idea... that [he has] to keep earning and proving [him]self”. Harvey similarly communicated self-blame regarding failure of the course: “I could have done more injury prevention. I could have stepped left. I could have stepped right, whatever it was”. There was also a sense of feeling somewhat unworthy as a soldier having never served in combat operations, resulting in George later volunteering in Ukraine; such sentiments were echoed by Adam, who also shared other colleagues feeling similarly “unworthy”.

Proving themselves as a man. The pressures associated with a typically masculine environment were communicated by many participants, with Eddie alluding to the “aggressive masculine” stereotype more likely to be fulfilled by prime military recruits, but that this was needed to have effective fighting forces. Such masculine pressures appeared to

stem from pressures both internally and externally; for example, fear of being questioned or bullied should they have to enact masculinity-compromising behaviours such as opting out of physical training. Individual differences in partaking in the masculine culture were prevalent; George shared that he loved the “macho male” culture but acknowledged that “you've got to have a bit of a tough, a tough skin on you ... you've got to take everything with a pinch of salt.” Paddy shared that he felt that being in the military solidified his masculinity and status as a man:

Such a thing of, what is it, masculinity or machoism about being in the forces that, yeah, you've been in a conflict. Yeah, you've been in a live fire fight. Yeah, you're more of a man sort of thing. I know it's ridiculous, but that is like a sort of a pervading mindset of, yeah, you tick that one off, you've done that.

However, the focus on masculinity meant that there was subsequently “a lot of fronting in the military” (Oscar) and that it was deemed weak or incongruent with the military identity to show emotion. Harvey shared that talking about mental health contradicted his officer status, and Ryan similarly shared that he viewed talking about his difficulties as a weakness. Due to the masculine culture of the military and the desire to uphold such an image, there appeared the tendency to “find people that are more willing to push themselves to the point of injury” (Frankie). Charlie shared that despite injury, “no one ever puts their hand up” to “opt out” of physical exercise due to the fear of bullying, resulting in his overuse injuries. He expressed resentment at this, sharing that “[his] body physically needs a rest to heal and then they have the audacity to go off on you and emasculate you”; similarly, Mike recalled being called “weak” for coming off his Cadre. Eddie admitted that he had also promoted the culture of “if you can't go to PT [physical training], you're lazy”. Brian echoed such reflections:

It was drummed into us because we were 16 years old, we were in the army, we're doing a man's job ... if you did show, not weakness, but emotion, back then, that was classed as weakness. And then you'll get singled out, so you try not to show it.

Participants also acknowledged likely generational differences; Brian reflected that the period in the Army in the 1990s was a “very masculine time”, whereas Eddie alluded to the more recent requirement to introduce diversity and inclusion quotas resulting in a greater focus on wellbeing. Differences between regiments were also discussed, in that the “more intellectual, reserved units” such as the bomb disposal unit and intelligence corps contrasted with other more “macho macho” environments (David). This is likely to have affected the masculine traits observed and experienced, along with the differing soldier characteristics that these regiments may have attracted, possibly those identifying less with masculine ideologies. The differences within regiments were also discussed: “You could go to one unit and it be a culture expected to be quite alpha and boozy versus quite an intellectual reserved unit, but it's the same regiment and so it's completely contextual to where you land” (Harvey).

The darker side of the military

Despite the attachment formed to the military identity, some participants shared that a darker sphere eventually prevailed, particularly when they experienced a threat to their physical or mental wellbeing. Experiences were described which culminated in the realisation that professional help was needed: “I was pretty much suicidal and that was when I realised I need to get help” (Mike), and “I thought I'd lost the plot. I got a lot of depression, but I just learned how to live with it” (Nate). Eddie described the need for someone to physically intervene as he was “just going off a cliff”. Kevin recalled feeling confused about why he was struggling, as mental health was not spoken about:

It wasn't until like months later that a doctor said, and how's your mental health been? And I was like, Why do I feel so suicidal sometimes? And he's like, yeah, that's perfectly normal. After, like a really heavy concussion, you would have, like, massive bouts of depression. And then you feel fine and you feel and you'd be all over the shop. And I'm like, why has nobody told me that?

The darker side of their military experience resulted in the need for separation from the culture for some participants. Nate appeared reticent to reflect upon his time in the military, sharing that it is “boxed away”. Paddy also echoed the need to remove himself from the military:

I had learned somehow to just sort of box that off ... it's not the fact that they were, they were killed that bothered me. It's the fact that I didn't care that they had been killed that bothered me ... so I'm either going to do myself, I'm going to do something ridiculous and get a few other people taken out.

Many participants communicated that the experience of an injury contradicted with the military identity, with Charlie sharing that “you're basically being essentially discriminated against because of it”. Paddy discussed that it took him a while for him to realise “it's okay not to be okay” and approach professionals for support, following which he was diagnosed with depression and complex PTSD. Kevin communicated a sense of discouragement from seeking support, considering the specific, identifiable building making it impossible to “go there [military mental health services] on the sly”. Eddie insinuated that mental health difficulties are generally viewed as sign of weakness and therefore incongruent with the tenets of the military identity:

If you ask for mental health assistance, if you didn't feel good, you would be downgraded so you wouldn't be able to deploy, you wouldn't be allowed to do your job ... you're not being accepted in a, in a social setting. People aren't going to play sports with you on Wednesday afternoons in PT, people are going to kind of expect you not to bother turning up because you're injured, like, they're all, all this label has massive consequences on people.

Coping in the civilian world

The final overarching category encompasses the experiences of participants in the civilian world and the shaping of transition, largely in the context of physical exercise. The following subcategories therefore illustrate different facets of the transition experience, spanning the umbrella of two broader categories of normative and non-normative transitions. As suggested by the Transitions Mapping Study (Curry et al., 2017), the distinguishment of normative versus non-normative transitions stemmed from research with athletes, finding differences in those whose careers were coming to an end due to the normal processes of ageing (normative transition), and those whose careers had been curtailed by unpredictable events (non-normative transition).

Normative transitions

Societal physical military ideals. Societal expectations about the appearance of the ideal military soldier or veteran seemed to influence participants' beliefs about their own body. For example, military brands on social media appeared heavily anchored in physicality, creating an "overtly masculine and muscular" product (Adam). There was therefore possibly a degree of pressure placed on participants to also feel the need to emulate such an image,

particularly considering the other categories rooted in body awareness, perfectionism, and aversion to failure. Oscar even ascribed some of his thinking about the military shape to this:

Probably because of all the wonderful things that Hollywood teaches you about what soldiers look like ... everyone associates the military with these superhuman muscle mummies. And the reality is very, very, very different ... Fat soldiers or airmen or sailors, they are slated. Because they're fat, you know, the expectation is if you're, if you're in the military, you are going to be fit.

The continued mesomorphic, muscular ideal was echoed in other participants, for example the “stereotypical one of big muscular man, seven foot tall” (Charlie) and “People had this sort of vision of being Arnie [Arnold Schwarzenegger] and being 6 foot five and built like a brick s***house” (Paddy). Oscar also shared that he felt “part of [his] relationship with exercise and body image has been motivated by what [he] think[s] the ideal should be, where [he is], and trying to make the two marry up”. Brian similarly associated the “green kit” with being “bigger” and therefore fitting the military ideal. Stereotypes were also prevalent in the fear of going the “other way”, as illustrated by Harvey:

I didn't want to be oh, that the moment that guy leaves the army sort of, lost, lost his shape and lost his self-respect. I didn't want to be that number or stereotype. Not that it's a stereotype. But you know what I mean, that kind of, that have that view. So there's that. There's like quite a lot of self-respect.

Physical exercise driving appearance ideals. Exercise participation for many participants therefore appeared to be rooted in the desire to maintain a shape they felt satisfied with and not wanting to “let [themselves] slip” (Jack). Whilst not a primary driving factor for some participants, many shared the wish to maintain a certain appearance ideal; for

example, George shared that the purpose of exercise participation was to return to an appearance and fitness level with which he felt most comfortable. Ian shared similarly that his goals for training were “purely aesthetic”, Luke echoed the desire to “look slim” and have things “not wobbling everywhere”, and Kevin spoke about enjoying the aesthetic element to his training. David shared what appeared to be a link between his appearance and his self-worth, by recalling “pulling fat in the mirror and feeling bad about [him]self” when he initially left the military. He also suggested continued comparisons with others in life post-military, referring to “the guys that beat [him] on the podium last weekend [he] know[s] for a fact are on anabolics [steroids]”. Brian shared that one of the motivators for his training was to maintain what he deemed to be an ideal aesthetic standard and connection to the military identity, in the context of his leg amputation. This also appeared connected to other facets of his identity; for example, the desire to prove to others that he is competent and capable, despite disability. The desire to make himself look “bigger and a bit more intimidating” also propelled the decision to try performance-enhancing drugs, after a recommendation by a friend who was also “ex-forces and ripped”:

I’m quite short. Certain people used to look down on people like that. If you, you know, you’re a short person, gonna be a weaker person. But, and I think that’s still in the way that I train and whatever else now, I’m short so, I can prove to you that I can do what you do and probably more.

The connection to earlier bodily awareness and current preoccupation and focus on body image was demonstrated by introspection of some participants, with Harvey sharing that “if [he were] to get sort of psychoanalysed, by, they would probably, like, drill right down into that ... [he is] so obsessed with it now because of some sort of childhood trauma (laughs) that had gone on”. Oscar shared that his focus on his weight is “now much more

about [his] own self-image ... [he] still associate[s] fat with being lazy, incompetent and all the other, it's quite ingrained". Some participants spoke about the need to alter their physical expectations based on where they are now, as opposed to hold themselves to the same standard as before; for example, Quentin shared that contracting long COVID has meant that he has needed to "mentally [adjust] that self-image", and when referring to the change in size and shape of his legs: "My legs have never been this small ... all that muscle mass has gone". Participants discussed feeling addicted to the results achieved from the exercise rather than the process of exercise, with the tendency to continue exercising despite injury likely stemming from not wanting to lose the progress made. Results rooted in appearance appeared to also occur alongside the functionality of exercise, with many participants citing health and longevity as a motivator for continued exercise participation (Frankie, George, Ian, Oscar, Paddy).

Retaining the military identity. Participants communicated varying extents to which they still desired to be identified as ex-military. Oscar shared that his military identity "defined [him] as a person" and that it has "become who [he] is", retaining many military-like traits to the present day, such as the length of his hair and purposely choosing to dress well, with such characteristics feeling "impossible to shake off since leaving". Exercise was consistently demonstrated across participants as a way of associating with the military identity, for example "owing it" to fellow soldiers: "I would almost feel like I was doing a disservice to my soldiers who are still serving if they were to see me now and I just completely lost it" (Adam). Connections between exercise and the military identity were demonstrated by other participants, with Brian referring to the "army mentality" in doing exercise, with the need to "push yourself as hard as possible". Brian's prosthetic also formed part of his military identity that he wanted to show and "stand up on stage" in his

bodybuilding competition, rather than feeling somewhat “weaker” and more vulnerable if he was in a wheelchair. The following excerpt is taken from Adam’s interview:

I still very much consider being part of the Gurkhas is part of my identity still. And I still socialise with former colleagues and it's still a big part of me and I think that sort of maintaining physical fitness is kind of important, is an important thing, not least because it reminds you of something that I really enjoyed. But to be honest with you it's almost like I'm a former officer. I should be fit and therefore I'll be fit.

Similarly, Kevin also demonstrated insightfully the connection between his physical capability and identity:

I was known as like one of the fittest guys, like I was like a fit lad, like there's levels, there's levels to that game and there's various people in the military who are considered like the super fit. And I was considered one of like, the super fit guys. So that idea of like, if I didn't go, that would really challenge my sense of identity because I'm like, I've always been considered an absolute machine when it comes to phys. At the [reference location], they're like, yeah, [Kevin's] like a, [Kevin's], a monster to fight with because he's coming and he's fit.

The importance of exercise forming part of routine was cited for most participants. Adam shared that having an online coach was “like being back in the military where you’ve got a PTI telling you what to do and it’s easy”, with Brian similarly sharing that the gym was a “replacement for when you're in the army”, citing the routine element of his bodybuilding competition preparation as “like being back in the army”. Exercise also appeared to imitate the military in other ways, for example Eddie described Brazilian Jiu Jitsu (BJJ) as enabling him to “breathe again”, due to replicating a “combative stressful situation ... but controlled

enough that [he is] not going into kind of a panic”. Kevin similarly shared the regimental-like structure of BJJ in terms of the rank structure, belt stripes, and seniority, and how this aligned with his military identity, along with his frequent resistance training: “The lifting weights ... getting up first thing in the morning, pumping iron, getting a sweat on is very military”.

Exercise also appeared to facilitate social connections in a similar way to that in the military; Luke described valuing the “group environment” of his cycling, and Paddy similarly shared that “all [his] best mates now are through the rugby club”. Continued associations with the military also appeared less purposeful; David admitted that he does not feel separated from the army purely because his friends are all military and so consequently, “relaxing evenings are still talking about the army, still talking about bomb disposal”. This was echoed by George who “still talks to people now that [he] met in 2012”, which likely stems from both the responsibility for and proximity with peers: “You are with these people 24/7” (George), and “I’ve been in the same room as this person every day for 10 years” (Kevin). Although not appearing intentional, some participants found themselves in employment where “80% of the team is veterans” (Mike) or “40% of the current company is ex-military or emergency services” (Oscar). Other participants also appeared to be drawn towards organisations with similar ethos around teamwork, along with roles working with veterans and in defence and public sector work (Kevin, Luke, Ryan).

Drive to help others. Some participants shared that the reason for joining was a sense of purpose and making a difference, which appeared to continue in the civilian world. Luke shared that he wanted to help veterans in the justice system, as he “wanted to give a little bit back to veterans because [he has] taken so much from the military during [his] career”. In a similar vein, Kevin proceeded to become a psychotherapist and worked with veteran charities, Paddy shared the value of possessing an active, supporting role in his job, and Ryan

actively chose organisations where he could support fellow veterans. As prior subcategories have also illustrated, some participants spoke about not having had the opportunity to serve in combat operations, equating this with being unable to show their worth as a soldier. Adam discussed frustrations associated with not being able to “prove [him]self” which he described as an “odd but natural affinity”. George, who wanted to “go out there and help people”, made the decision to volunteer in Ukraine in 2022 several years after he left the military:

I wanted to go and do you know, military stuff that I joined the army to do that I never got to do. And that's not I'm not just saying, you know, going out and getting in firefights and shooting, but it's just everything about it. You know, you do all this training throughout your whole career for, not to be put to use, was a bit like, what was all that about? (laughs)

Motivation to achieve more. Being in the military appeared to help some people realise their own capabilities, motivating them to strive for more in the civilian world. Ian shared that he left the military to go to university, having “marshalled [him]self to such level of discipline ... go back and get qualifications”. Luke also shared that his ongoing desire for a challenge meant that he chose a civilian job as opposed to retirement. However, for some participants, the drive to achieve more appeared to result in burnout; Nate shared high standards resulting in him being his “worst critic”, and Oscar shared that having a mindset where he “always [ran] the fastest way on the hamster wheel” resulted in burnout in multiple jobs.

Brian shared that since leaving the military he has continued to challenge himself in different ways, as observed in the following: “Before I had my leg off, I was doing disabled Strongman anyway ... I don’t make it easy on myself. I have to push myself to the limit all the time. Otherwise I’m not happy”. Similarly, David shared that he has “taken on training for

Strongman and started competing in Strongman events”. Kevin also communicated the desire to constantly strive for more, as observed in a multitude of post-military achievements. He referred to this tendency being driven by the love of what he does, and being “proud but never satisfied”, as opposed to external validation or proving himself to others. Such a desire to achieve more was likened to earlier experiences and their aversion to failure, as Brian shared:

I get annoyed about myself because I'm fail – I don't want failure. That's the one thing I try and avoid. And that again is due to my childhood and my time in the army. Failure is something I don't do very well with. I try and avoid things if I can instead of, erm, failing. And again, that's part of going to the gym as well. I gotta do it, 'cause I don't wanna fail.

The drive to continue exercising was attributed to not wanting to lose what they have built, along with “incremental failures adding up over time” (Luke), and the fear of “letting the standard slip” (Harvey). Many participants referred to military standards and the desire to still meet these in the civilian world, to which Frankie referenced “mentality training” as ensuring his fitness remains above a certain zone; Harvey similarly shared that he always feels the “need to abide by the standard that [he had] set out to achieve”. George also reported often comparing himself with his previous fitness standards, along with Eddie choosing to participate and compete in BJJ at a high regimental level against highly skilled athletes. David also used the military standards to determine his current fitness: “A 13-minute 2k [kilometre], that's such a minimum threshold to me that I'm like, I need to maintain that. If I don't maintain that then I'm getting unfit”.

Non-normative transitions

Separation from the military identity. Themes around rejecting the military identity prevailed, including distancing themselves from that part of their life, dissociation from their experiences, and maintaining their personal identity as firmly separate from their military identity. Nate was reticent to talk about his military background, referring to “closing a box”, and when discussing his identity as an ex-soldier, it is “something [he has] ... ever since then, tried to reject”. Paddy shared that although he was reluctant to disclose his military background to his children for the purpose of protecting them, he occupied a role at work where is the “support veteran” of partners of soldiers or veterans. He spoke about the need to look forwards in his life: “It was, that's who I was. So that's let's put that away. And now let's concentrate on who I'm going to be”. This appeared to follow a period of dissociation, where he no longer felt empathy for people he had killed in battle:

I really felt I had to have a clean break because if I didn't stop completely, I probably would have gone back. It sounds very dramatic and it does sound ridiculous, but I wanted to retain most of the humanity I still had left.

It appeared that the cultural emphasis on high performance and good physical condition contradicted with the consequences of both physical and mental injury. Some participants shared feelings of being a failure and shunned out, with insufficient effort made by the military to rehabilitate. Frankie referenced the military rehabilitation process as “impersonal” and that he was “lumped into a class ... rather than a tailored approach”. Charlie described feeling segregated from his peers, bullied, and “essentially discriminated against” because of his injury limiting his ability to exercise. His ability to reflect and conceptualise his experiences culminated with descriptions of the military as “still too much of a dictatorship”. Nate echoed this with his comment that “once you’re on the other side of that ... you can see that obviously, the Army want a standard from you, but I started seeing

how ridiculous it was". The degree to which people felt associated with their military identity as demonstrated above operated on a continuum; there appeared willingness to accept that whilst "a soldier is definitely part of [their] identity", that "it is going to come to an end at some point" (Quentin). This perspective was possibly made possible by the fact that Quentin felt his time in the military "augmented and supported" rather than "made" his self-worth.

Coping with a contrasting civilian world. Many participants reported struggling without the sense of community and support they had valued whilst in the military. The sense of feeling "shielded and protected" (Ryan) in a very controlled environment was contrasted with the experiences with which many participants were confronted in the civilian world, as described by Adam:

I think my adjustment was challenging just because you sort of, operating at a high level and professionalism in the military and you are inherently highly trained and, and, you've got an incredible identity that you've built up because from everything from your like, what you wear, how you speak, how you walk, how you dress, everything is military and suddenly you leave and you're thrust into this completely, you know, for in, in many ways, foreign world where there's, there's not that rigour and that regimental and focus which can be difficult.

Coping with a loss of purpose was described as challenging by numerous participants, with feelings of being "out of place with no structure" (George). As such, exercise was attributed as a coping mechanism in an unfamiliar world; for example, supporting them when they feared they had "lost [their] mind" (Paddy), and when they had experienced suicidal thoughts (Kevin) or struggled with anger (Nate). Exercise seemingly acted as a tool to escape; a way to "switch off from everything around [them]" (Brian), and for the "head [to be] quiet" (David). For others, exercise was also posited as a distraction; Charlie spoke about

the importance of “keeping [his] body and keeping [his] mind completely separate and doing something and focusing on something for a period of time”. Oscar similarly shared that his “mind starts to go to dark places quite easily” and exercise “keeps [him] going” by enabling him to “turn [his] brain off”.

Brian referred to the gym as a “replacement for when you’re in the army”, having particularly struggled upon discharge; he joined the military at the young age of 16 and consequently “knew nothing of how to look after [himself]”. David also shared that whilst he managed relatively well, he knew of others who upon leaving the military feel “purposeless and quite a few of them have turned to phys. [physical exercise] as what they do now”. Oscar referred to civilian life as “very lonely”, with the individualistic culture of some workplaces experienced as isolating and othering. Overall, it appeared a stark contrast to the collective, team-based ideology of the military; for some, what had specifically drawn them to join (Ian, Oscar). Paddy shared difficulties in coping with the democratic nature of civilian employment compared with the military where “you didn't get a voice in it. You were told what to do by the person above you. And that's just what it was”. He illustrated further difficulties during the initial transition phase, given he had joined at a young age:

From that side it was a bit - jarring, almost. Of, right now I've got to see the actual jagged edges of real life, after having, no one's telling me. I've got to go and do this now. And it's like I've got to find an actual job and a washing machine (laughs). And I need to know how to do all these things.

Exercise also appeared to mediate other difficulties encountered in the civilian world; for example, frustration with the lack of signposting and onward support. David admitted scoring highly for depression on one of the exit medical examinations, only for the doctor to

do “absolutely nothing with this information”, with Nate similarly feeling “fobbed off” to a charity, rather than receiving specialised support from the NHS.

External validation. Some participants shared the continued need to prove themselves in the civilian world. For example, Oscar shared that he is trying to challenge his pre-existing tendencies to seek others’ approval and achieve external validation by “moving away from trying to be so competitive with everything and trying to find metrics that [he] can measure [him]self by”, admitting that he is “awful at internally validating [his] self-worth”. Kevin explained that although he would still like to be recognised for being a “phys. beast”, he is slowly relinquishing the desire to prove his worth to others, and replacing this with emphasis on achievements centred on enjoyment. Brian shared that he still felt a degree of needing to prove to others that he is capable and strong despite his disability, resulting in the desire to “push [him]self even more”:

Just looking at through other people's eyes and thinking, oh, he can't do that. He's, he's missing the leg or whatever. And then I'm like, yeah, I'll show you what I can do ... to prove to a lot of people, it doesn't matter if you have a disability. If you want something, you will push yourself to get it.

Amending expectations. Whilst the tendency to hold themselves to similar expectations they had whilst in the military was still prevalent, participants also spoke about the need to adjust their expectations accordingly. Quentin shared that the long COVID has meant that he is “reconciling [him]self to the fact that this isn't just going to go away”, and “accepting [he] can't do two-hour gym sessions anymore”. Luke similarly discussed having to reduce his running and pick up a less impactful sport due to injury, with Harvey sharing the need to reassess what he can do due to his injury: “Longer stuff that I enjoy, longer runs, longer cycles, being out in the fresh air is harder because I get past an hour and it really starts

to hurt. But I just work around that”. Oscar echoed these thoughts with his training and the need to come to an “acceptance of [his] own limitations” regarding his running speed. Brian also spoke about accepting and adapting to his prosthetic, with it now forming part of his identity, as prior subcategories have described: “Some things take longer, some things are harder. Some things I can't do. But that's just part of being an amputee and it will be ... it's who I am now”.

Discussion

Chapter overview

This chapter critically considers the findings of the research, beginning with a summary of the theoretical model described in the Results chapter. The theoretical model is then discussed in more detail in relation to the overarching categories and existing literature relevant to the study and research aims. Critical reflections on the research process are then offered, including the researcher's own reflexive account. Methodological critique is then considered in the form of both strengths and limitations of the study, concluding with clinical implications and suggestions for further research.

Summary of findings

The study comprised in-depth interviews with 18 male military veterans in the UK, following identification of a gap in the literature regarding the experiences of body image in this population (Keeling et al., 2021). For this reason, considering previous literature around the role of physical exercise in masculinity (Wienke, 1998) and re-establishing a sense of self (Evans et al., 2020), the current study aimed to develop a theory, grounded in the data, of the function of physical exercise participation in UK male military veterans and how body image and masculinity ideologies come into play. The sample consisted of veterans from all three services with differing physical and mental health difficulties and varied forms of exercise participation. Although there are some limitations associated with the sample discussed later in this chapter, such heterogeneity in the sample contributed to the strength of the theory (Charmaz, 2014).

The analysis revealed three overarching categories, representative of sequential points in a timeline, encompassing categories and subcategories within each timepoint. The final

theoretical model, including linking of the categories, conditions, and additional mediating factors, is illustrated diagrammatically in Figure 4 in the results chapter. Participants discussed formative experiences that precipitated the military, which formed three conditions: experiences and values prompting enlistment, earlier body awareness, and elevated pressure from a young age. These converged into the second overarching category of the formation of the military-masculine identity, embodied whilst they served in the military. This captured interrelated subcategories including improved physical capability, acceptance within a new family, and the desire to perform highly as both a soldier and as a man. This overarching category then diverged into two categories upon exit from the military: both normative and non-normative transition experiences whilst coping in a civilian world. The theory in its entirety is firstly elucidated, followed by further discussion of the categories and the relationship between them, supported by the consideration of both seminal and more recent literature (Bolderston, 2008).

The grounded theory

The theory offered a lifespan perspective to explore the storied life of military veterans; although unintentional, it proved essential as narratives of identity emerged and so was crucial in understanding how these identities developed, maintained, and progressed (McAdams & Olson, 2010). This was particularly beneficial considering “war experience as simultaneously narrative and embodied” (Caddick, 2021, p.157), along with the value of previous research that has adopted such a perspective (Caddick et al., 2015a, 2015b). This is also concordant with sports transitions research that emphasises using a holistic, lifespan developmental perspective to consider the contextual factors relevant to transitions (Siekanska, 2013). Integrating the findings into a theory was important considering that theories and frameworks provide a cohesive way of examining complex phenomena like the

military-civilian transition in terms of planning policy, service delivery, and research (Pedlar et al., 2019).

In the current study, body image in male military veterans and the ongoing use of physical exercise can be understood as the function of three sequential factors. Conditions earlier in life (experiences and values prompting enlistment, earlier body awareness, and elevated pressure from a young age) affected the degree to which participants associated with the military identity (including identification with the physicality of the soldier, involvement in the competitive, comparative nature of the camaraderie, connection with the ‘military family’, and the need to prove themselves). Combined with the discharge circumstances, this influenced differing degrees to which participants experienced elements of both normative and non-normative transitions. Physical exercise appeared to be used as a method of ongoing association with the military identity in different forms, including maintaining the physical appearance reminiscent of that as a soldier, as a coping mechanism in an unpredictable and challenging civilian world, and to make and maintain social connections. The model acknowledges differences within and between regiments and units, along with personality differences, that are likely to affect each overarching category. Supporting acclimatisation to the civilian world was a sense of introspection demonstrated by some participants about their experiences, obtained through both professional support and self-reflection. On a more macro-level lie masculinity ideologies and stereotypes and assumptions about military veterans, which filtered through all categories: the societal masculinity-related pressures and discouragement of emotional expression, compounded by having been a soldier, with both forms of identity directly contradicted by the experience of illness or injury.

The theory encompasses aspects of the MoAT (Schlossberg, 1981), reflecting other theories that also draw upon these principles: the earlier discussed MTT (Castro et al., 2014)

and the MoTiVe (Cooper et al., 2017). Normative and non-normative transitions, referred to by Schlossberg (1981) as anticipated and unanticipated transition types, are both distinguished by elements included in the MoAT, such as role changes and stressors, personal characteristics, social connections, and coping responses (Schlossberg, 2011). Elements of the MTT (Castro et al., 2014) can therefore also account for this, as it considers many factors discussed by participants and associated with the transition trajectory: the nature of the discharge and transition, personal characteristics, factors impacting the progression from service member to civilian life, and outcomes such as employment, family, and health.

Elements of the theory could also draw upon tenets of the MoTiVe (Cooper et al., 2017), in that participants spoke about individual trajectories that appeared to influence the degree to which they associated with the military identity and subsequent transition experiences, along with altered constructs of masculinity and identity, rather than a linear or dichotomous understanding of identity construction and deconstruction (Cooper et al., 2017). The habitus could be reflected in the first overarching category of the formative experiences pre-military, where participants presented with what could be interpreted as subconscious dispositions earlier in life, in both identity and prompting enlistment (i.e., adverse earlier experiences and personality traits such as perfectionism). Capital refers to the identity acquired throughout immersion in the military culture, which comprised participants' experiences whilst serving in the military, bonds formed within the "military family", and the degree to which they felt like a soldier. Space, as represented by the experiences in the civilian world post-discharge, appeared to differ depending on a variety of factors: experiences earlier in life, attachment to the military identity, and the circumstances surrounding the discharge.

Regiment and unit differences are highlighted within the theoretical framework to represent participants' voices about structural and cultural differences (e.g., physical exercise requirements and adherence to masculinity principles) within and between individual services, regiments, and units, as research has supported (Edmunds et al., 2016). This is also suggested by the MoTiVe, where the legacy of the military service may well likely express itself differently through the habitus (Cooper et al., 2018), and that "some army lives have been closer to civilian experiences than others" (Walker, 2013, p.298).

The following sections therefore aimed to identify and elaborate the overarching categories with particular reference to body image constructs and masculinity ideologies without assuming they are mutually exclusive or exhaustive; for many participants, they interacted and combined (Snow & Moss, 2014), as illustrated by the arrows on the diagram (Figure 4). Sensitivity to these conditions and categories can assist health professionals in understanding why a military veteran may be more susceptible or vulnerable to developing difficulties and what can be implemented to support them.

Formative experiences pre-military

The first overarching category encompassed the earlier experiences shared by participants that precipitated enlisting in the armed forces, key to the final theoretical framework as it influenced the degree to which participants later relegated importance to their body and the ongoing use of physical exercise. Epidemiological studies documenting the contextual factors associated with recruitment into the UK armed forces is scarce; research has prioritised studying the motives of female soldiers as opposed to men (Duncanson & Woodward, 2016), and few studies generally consider the role of veterans' childhood experiences as contributing to transition issues (Grimell & van den Berg, 2019). The UK armed forces have historically recruited from areas with high socio-economic deprivation and

social problems (Johnstone, 1978), which has continued over time; Iversen et al. (2007) found pre-enlistment vulnerability to be common in the UK military, centring on childhood home environment and behavioural disturbance, with a trend between increasing vulnerability and both psychological and physical ill health. Childhood adversity has been found to prompt enlistment in many cases (Blosnich et al., 2014); reasons have included “family problems, a suffocating environment, a poor job market, or a broken relationship” (Ginexi et al., 1994, p.9). Whilst some participants shared that enlisting had been values-driven, others positioned the military as an escape, offering protection from earlier experiences such as abuse, homelessness and addiction. Although exposure to adverse childhood experiences (ACEs) may increase vulnerability to later stress or trauma in the military (Brewin et al., 2000), other research has suggested that the experience of ACEs may increase resilience by its protective function or inoculating effect improving the capacity of soldiers in coping with combat stress (Levine et al., 2009).

Many participants reported heightened awareness of their body before joining the military, which appeared reinforced by childhood bullying or the common school-like culture of “getting picked last for a team” (Cardinal & Cardinal, 2013, p.51), which interestingly appeared not to impact exercise participation later in life. Whilst seemingly not directly influencing the decision to join the military, one might wonder that subconsciously, these people had sought out a job more active and physically exertive to attain an idealised body (Bartlett & Mitchell, 2015). Application of the previously presented masculinity ideologies (Gerschick & Miller, 1994) may also suggest that men who perceived themselves to not meet the masculine body ideal earlier in life subsequently adopted the reliance strategy of striving to meet the masculinity cultural ideals more strenuously, by not only joining the military but striving to embody the physical aspect of being a soldier in its entirety (Wienke, 1998).

There were also associations between increased cognisance of appearance in childhood and the third subcategory, where participants shared tendencies relating to perfectionism, such as the drive to succeed, fearing failure, high standards, and being disciplined and highly critical. Despite the lack of literature concerning perfectionism in military populations (Myrseth et al., 2018), perfectionism has been related to the internalisation of societal body ideals and constructing self-worth on external appearance (Grammas & Schwartz, 2009); likewise, perfectionism along with gender role socialisation is a correlate of body image difficulties in men (Davis et al., 2005). As echoed by a participant and a finding from the earlier systematic review, research has found associations of “fatness” with stereotypes of being lazy or weak (Atkinson, 2011), suggesting increased cognisance of body shape for people more perfectionistic in nature (Madigan et al., 2017).

The above perfectionistic tendencies also echo the traits desired in the military (Jackson et al., 2012), which may have influenced the decision to join (Murphy & Sharp, 2011). Myrseth et al. (2018) found that military recruits higher in perfectionism and self-efficacy showed greater development of military skills during training, suggesting that veterans meeting this condition in childhood may be more primed to associate with the desired military qualities (Bobdey et al., 2021). This may also have precipitated later promotion considering the officers of the study shared a particular affinity to the military identity, likely due to deeper involvement (Smith & True, 2014). Participants also shared elements of both perfectionism dimensions proposed by Stoeber and Otto (2006): *perfectionistic strivings* (high expectations, striving for perfection) and *perfectionistic concerns* (fear of failure, self-criticism), which have differential effects on both identity development and diffusion (Piotrowski, 2019). Although these generally appeared to be associated with a stronger military identity, some participants indicated the absence of earlier

identity formation; having unmet needs for acceptance and belongingness are antecedents for later powerful, enduring emotions such as shame (Bowlby, 1980). As suggested in the current study therefore, ACEs may also be connected to perfectionism (Chen et al., 2019), further supporting the multidimensional and multidirectional relationship between the three categories.

Formation of the military-masculine identity

The second overarching category encompassed several subcategories to illustrate converging of all the initial differences into one embodied “military-masculine identity”. This reflects the earlier discussed transformational process encompassing basic training when initially recruited into the military and referred to as a total institution: complete enmeshment into the shared identity and separation from the outside world (Goffman, 1976), reinforcing collective belonging (Tajfel & Turner, 1978). The initial culture shock described by many participants that comprised basic training was also named as one of their greatest achievements, reflecting research describing construction of the military as a “rite de passage” turning boys into men (Christensen & Kyed, 2022). Considering that the military has been termed a central arena for defining hegemonic masculinity (Connell, 1995), with the male soldier represented as one of the most fundamental depictions of masculinity (Enloe, 2000), many participants conveyed a sense of “needing” military masculinity to have effective fighting forces (Messerschmidt, 2018).

The degree to which participants’ sense of self appeared to align with the military identity rested on the three previous conditions under the overarching category of formative experiences pre-military. According to Erikson’s (1959, 1968) psychosocial theory of identity development, the fifth psychosocial stage, often developed during adolescence, contributes towards a sense of identity. If this stage is not met, for example interrupted by traumatic

experiences (Waterman, 2020), the normative identity process is disrupted, with the individual reaching identity diffusion (Marin & Shkreli, 2019). Joining the military may therefore replace or create such an identity; many participants shared general feelings of acceptance, camaraderie, community, family, and the sense that they will be protected, overall forming an identity in the context of the collective (Dolan et al., 2024).

Research has also suggested that individuals lacking a clearly defined sense of self are more likely to adopt external norms of ideal body attributes (Vartanian, 2009), which may explain why participants who had disclosed a degree of childhood adversity also seemed to hold the “soldier appearance” as a central aspect of their identity. As detailed above, this may also be connected to adoption of the reliance masculinity strategy (Gerschick & Miller, 1994). Perceptions of not meeting body ideals prior to joining the military appeared indirectly addressed for many participants due to the physical standard they had to achieve whilst in the military, creating the soldier in its prime physicality (Keeling & Sharratt, 2023). For these participants, physical exercise appeared to be used consistently throughout discharge and transition, suggesting the inclination to preserve the body attained in the military and thus maintaining an element of their military identity (Keeling, 2018).

Identification with the category of elevated pressure from a young age also correlated with a strong desire to perform highly as both a soldier and as a man in the military. Such a desire appeared particularly salient among the officers of the sample, likely resulting from the expectation to “lead from the front” and that the military identity has been found to deepen with rank promotion (Smith & True, 2014). Whilst traits of adaptive perfectionism appeared advantageous in the military to a certain extent in activity mastery and development of skills (Myrseth et al., 2018), such traits seemed to be negated in the event of adversity or other

challenging circumstances (e.g., experience of injury), due to participants' beliefs around self-blame and failure (Hanchon, 2010).

The most valued part of being in the military appeared to be the family-like organisation and camaraderie shared with peers who participants lived and worked with, echoing previous research (McCormick et al., 2019). However, this would often be to the extent that some units would feel impermeable, with participants refused transfer to other units or regiments even for the purpose of furthered employment opportunities. This is potentially reflective of the closed nature of the subcultures of the military and strong reliance on the one cohesive unit (Siebold, 2005), deepening identity and belonging (Kirke, 2010). Interestingly, although participants communicated varying degrees to which their unit and regiment “felt masculine”, and that there was a lot of “fronting” in the military, there was a consensus of being accepted as they were, possibly furthering the extent to which they felt part of the in-group (Tajfel & Turner, 1978).

Even in the military, identities remain a process and are “constituted by social relations and interaction” (Walker, 2013, p.288). The narrative theory of the self (Ricoeur, 1980) highlights how individuals achieve selfhood and continuity over time, incorporating both collective and individual processes of meaning. During the pre-exit period, leavers engage in a “personal construction about the kinds of soldier they think themselves to be set against anticipated civilian lives” (Walker, 2013, p.290). Participants who had a formed identity before joining the military appeared more able to disconnect from the military identity and is reflected in their descriptions of feeling as though the military augmented some characteristics, rather than forming them. This yields the question of “does the military make the man, or does the man make the military?” (Jackson et al., 2012, p.270); certainly, in the current study, the relationship appeared to be more complex than this, with the conditions

and categories offering an explanation around how experiences earlier in life can make someone more susceptible in “taking on” the military identity.

Coping in the civilian world

As stated above, many experiences described by participants appeared reflective of tenets described in the MoAT (Schlossberg, 1981, 2011). This overarching category comprised both normative and non-normative transitions; whilst normative transitions are expectable and predictable, non-normative transitions are unexpected, drastic or sudden, producing diverse consequences, and are typically more difficult to manage (Wylleman & Lavallee, 2004). Participants shared features of both type of transition experience, reflecting findings that post-discharge stress and difficulties adjusting are universal to varying degrees and can be regarded as normal (Pedlar et al., 2019).

Both the forming and shaping of identity is considered a key determinant of a successful transition experience (Ahern et al., 2015), meaning that consideration of formative predisposing factors in the theory was felt to be crucial. Due to the increased vulnerability of service members in experiencing ACEs and coming from unstable backgrounds (Blosnich et al., 2014), such experiences have been suggested to significantly contribute to problems in a person’s sense of identity (Wong et al., 2019), as well as their ability to transition successfully (Lake & Armstrong, 2020). Participants shared a general sense of needing to separate from yet still identify with the military, reflecting other research showing enmeshment with the military identity even after discharge (Dolan et al., 2024). For example, participants shared living by the same values and norms, such as lifting “heavy iron”, enjoying combat sport, and prioritising employment with a collective, team-based feel. This supports the MoAT highlighting a smoother transition if the difference between the transition environments is small (Schlossberg, 1981).

Whilst not a central role for some, cognisance of the “military body” was present for many participants in the desire to still be identifiable as ex-military. Feeling as though they were no longer able to meet the mesomorphic ideal deemed favourable by society, according to gender role endorsement (Tylka, 2021), may have meant adoption of the reliance strategy, involving the desire to meet the physically and outwardly “fit” ideal (Gerschick & Miller, 1994). This may happen particularly in the context of physical or mental health difficulties that unsettle masculinity (Sparkes & Smith, 1999), culminating in the desire to prove to people that they are still masculine or worthy (Shakespeare, 1999). This could be illustrated somewhat by participants who shared a degree of dependence on bodybuilding, depicted as a symbol of power and connoting confidence within the social environment (Lefkowich et al., 2017); overall, the muscular body created by bodybuilding is thought to be a signifier of masculinity (Mellor et al., 2014). Those who had disclosed a history of difficulties in childhood relating to body image or other ACEs therefore appeared to have a much closer association with their body as a “project”: a social entity to work on and to present to others as a depiction of their mental and physical strength (Gill et al., 2005).

For some participants, reassessing the importance and value of their body may have also presented in the form of an identity crisis (Mishkind, 1986). This appeared to be comprised of the loss of the military social identity and its accompanying psychological security, particularly for those whose self-worth may have been dependent on it (Trepte & Loy, 2017). It has been suggested that this effect is more pronounced in those with ACEs (Wong et al., 2019); indeed, in the current study, some participants shared the desire to still represent physicality but also maintain other aspects of the military identity, particularly for soldiers whose narrated and coherent sense of self was deeply intertwined with the military (Walker, 2013). This connected with the tendency for existential loss: no longer being able to

identify with an organisation that protected people from adverse earlier experiences (Tarbet et al., 2021).

Although sentiments were shared relating to not caring about the appearance of their body, this could be adoption of the reformulation strategy (Gerschick & Miller, 1994). Participants may have reconciled with their body as once being a form of masculine capital in the military in the embodiment of the male soldier, but renegotiation to alternative symbols of masculinity in the civilian world (Caddick et al., 2015a). Many participants described their civilian lives still being military-like in some ways, for example seeking employment where military-like values were prioritised or maintaining high standards of physical exercise. Exercise participation therefore appeared to retain aspects of the military identity, such as benefiting from the camaraderie and the sense of community (De Visser et al., 2009). It seemed to imitate the bonds formed during the military during physical training in what a participant called “shared suffering”, also found in the literature (Mercurio, 2019). Physical exercise was also cited as a way to manage difficult emotions and as a form of escape in the civilian world, possibly to “rebuild masculine capital they had lost by appearing vulnerable” (Caddick et al., 2015a, p.103). Personal encounters with injury or other health conditions additionally appeared to influence participants reconciling and adjusting their masculine norms, moving away from the material body as the emphasis (Gerschick & Miller, 1994). Such encounters were likely perceived as weaknesses or a threat to their masculinity, considering that disability and masculinity are conflicting identities “because of the ostensible contradiction contained in the stereotypical versions of each” (Sparkes & Smith, p.77).

Similarly to the findings above by Caddick et al. (2015a), exercise participation in the current study appeared to be concordant with the three phases outlined by Evans et al. (2020)

encapsulating the perceived loss of masculine identity following an injury. The first phase of life prior to injury revolves around the embodiment of a soldier, including professional expertise and having a strong body, with the identifying uniform viewed as a “signifier of a professional identity and gendered regime that permeated all aspects of participants’ lives” (Evans et al., 2020, p.704). Narratives shifted towards being more unsettled in the second phase, where some participants became injured and underwent rehabilitation, experiencing biographical disruption (Bury, 1982). Declining physical capability was positioned as a signifier of lowered masculine prowess and an overall loss of identity, considering the all-consuming nature of the military social identity (Woodward & Jenkins, 2011). In the final phase and echoed in the current study, veterans engaged in practices encouraging re-establishment of alternative forms of masculinity in forms of sport and exercise participation, with veterans displaying overall “multiple, fluctuating regimes of masculinity” (Evans et al., 2020, p.711).

Some participants also conveyed ideas relating to the rejection strategy (Gerschick & Miller, 1994), with societal conceptions of the body ideal viewed as problematic and narrow, and instead prioritising exercise for longevity and functional value. Although generalisation was limited due to the age demographic within the sample, the older veterans in the study communicated prioritising the internal function of the body, in line with Drummond (2009). In a similar vein, Wienke (1998) suggested a holistic reconciliation of the three strategies proposed by Gerschick and Miller (1994), involving men avoiding dialogue with the dominant standards of masculine bodies, and instead reconciling the completeness of the body and mind. Indeed, this was reflected in some participants, who shared that they were moving away from perhaps more conventional gender ideology and discovering alternative metrics to demonstrate success or achieve contentment. A similar concept termed *mosaic*

masculinities (Coles, 2008), which involves the reassembly of masculinity more compatible with their own capabilities, also appeared applicable for participants who shared the need to accept and adapt to their changing abilities due to health conditions or injuries.

For some participants in the study, their health condition or injury severely impacted their civilian lives. The concept of a *spoiled identity* (Goffman, 1963) may be particularly relevant when understanding the shift from being an able-bodied, masculine, prime soldier, in that stigmatising traits held both by veterans and society reduces the bearer “from a whole and usual person to a tainted, discounted one” (Goffman, 1963, p.3). This is particularly applicable to those viewing their military status as a masculine social identity, and in turn threatened by the experience of illness. Such a shift to being less abled was shared by some participants; in relation to gender role endorsement theory, the experience of an injury may threaten their masculinity due to compromised ability to partake in the physical labour element of the military and in civilian life (Evans et al., 2020).

Some participants displayed a high degree of introspection throughout the interview and were able to psychologically reflect on their experiences; for some, this had been facilitated by professional support in the form of therapy. Whilst it is unclear what made certain participants feel able to reach out for support, it could be hypothesised that some had accepted that communicating distress or receiving help was not compromising them as a man or equated with weakness. As suggested by Caddick et al. (2015), help-seeking may have been reframed as a masculine act, in that “having proven their masculinity through military service, the veterans were able to trade on their masculine capital to turn asking for help into a resource for wellbeing rather than a threat to masculinity” (p.106). Other research has echoed “softer” forms of masculinity taken up by men more recently, such as emotional expressiveness over stoicism and aggression (Anderson & McCormack, 2018). This is

reflective of masculinity being fluid, nuanced, and changeable over time; overall, a dimensional construct (Higate, 2003), and the use of therapy to reconstruct narrative identity, encouraging different goals and ways of living in the civilian world (Grimell & van den Berg, 2020).

Reflections on the research process and the role of the researcher

The research was positioned from a relativist and social constructionist perspective in acknowledgement that stories were co-constructed between the researcher and the participant, with the possibility that the story may have been told differently on another day or time (Berger, 2015). It was also felt that prioritising transparency, honesty, and openness was beneficial over remaining objective and neutral (Jacobs et al., 2021). Considering military-centred research as socially and politically located, along with opposing cultural narratives, studying veterans should begin with “acknowledgement of the complex relationships between people, places, and practices” (Bulmer & Jackson, 2018, p.26). Contradictory representation and objectification of veterans as heroes, symbols of national pride, victims deserving sympathy, or conversely, as problems to be solved (Ashcroft, 2014) are often rooted in medicalised discourse, failing to acknowledge their complex experiences (Buckman et al., 2013). Reflexivity is thus needed on the part of the researcher and how this will invariably influence conclusions made (Dodgson, 2019). The following reflections will therefore be written from a first-person perspective (Lamb, 2013).

The researcher as an outsider

I regularly considered the core tensions within understanding and representing veterans' lives as a civilian researcher. Although I was careful to not claim I “knew” the veterans' experiences, it was important to analyse the conditions under which the research

was conducted (Carreiras et al., 2016), considering that “power determines where voices are heard within and beyond this field” (Caddick et al., 2019, p.97). I positioned myself as a “naïve student researcher” who, being an outsider regarding gender and civilian status, could learn from them. However, I also acknowledged that in being an academic and working for the NHS, I occupied positions of power in other ways. I often reflected on the anxiety I had around producing something that I feared might be too removed from the veterans’ experiences and regularly reflected upon how differences in status in the researcher-researched relationship can influence both data collection and interpretation (Higate & Cameron, 2006).

Considering that veterans have often been subject to the “objectifying gaze of researchers, policymakers, and service-providers” (Bulmer & Eichler, 2017, p.174), I remained cognisant of the danger of my academic mastery subjugating the stories of others (Caddick et al., 2019). I was frequently torn when making conclusions and extrapolations from the data to create a theory; I often feared misrepresentation of the stories and wondering if it is “ever valid to speak for others who are unlike me or who are less privileged than me” (Alcoff, 1991, p.7). Although appreciation of this throughout is reflected in memos and reflective accounts, my interpretations of the data may have still led to erroneous generalisations or misrepresentations of participants’ experiences, or inadvertent stigmatisation (Adikaram et al., 2022).

However, the idea that it is impossible to understand military experiences as a civilian and thereby preventing any non-military person from engaging in such matters has been critiqued by some authors (MacLeish, 2016). Such disavowal of responsibility created by insider/outsider experiences can amount to an abdication of responsibility, risking placing the sole onus onto veterans for researching themselves. Additionally, civilians have responsibility

in supporting veterans through research if they may be part of a group who perpetuate the difficulty in transitioning or any stigmatising attitudes about this population (Wigginton & Setchell, 2016). There is some benefit of naivety to the research process (Hayfield & Huxley, 2015), especially considering GT was utilised which encourages approaching the data with an open mind (Giles et al., 2013). Considering the sample, it may also be that being open about vulnerability may be perceived as less threatening to their military or masculine identity if they are conversing with a civilian as opposed to a fellow veteran, along with potential conflicts of interest in insiders (Yost & Chmielewski, 2013). As an outsider, I may also occupy a position where I have more social influence or power extending beyond the population, in my ability to both conduct and disseminate the research. However, my role in the NHS as a trainee clinical psychologist may have also influenced the interactional dynamics, given that some veterans experience distrust towards health professionals, in the context of challenging prior experiences (Randles & Finnegan, 2022).

It is also not as straightforward as the researcher holding power over the researched; power is generally more dispersed and contested (Pini, 2005). Considering one of the focuses of the research was masculinity, it was important to reflect on how gender may have played a role in the interactional dynamics in the interview. Although being female positioned me as an outsider from another perspective, it also positioned me as less powerful considering gendered ideologies of power and intersectionality (Lee, 1997). Some participants also expressed that there was the tendency for soldiers to seek out a female peer for comfort whilst in the armed forces. It is possible that following dominant notions of masculinity may have suggested that speaking vulnerably to a fellow male would have been difficult (Lee, 1997), meaning that such conversations with a female respondent enabled men to feel more able to speak about vulnerable experiences without threatening the presentation of their gender

identity (Green et al., 2010). Additionally, leaning into dominant feminine norms but also traits associated with being a therapist, such as being nurturing, patient, compassionate, and passive may have enabled participants to feel less guarded (Cassell, 2005), permitting them to participate in a vulnerable conversation, or more “traditionally feminised activities” (Lefkowich, 2019, p.4). Participants following more dominant masculine norms may have even performed more stereotypically masculine behaviours such as avoiding emotional reflection in the presence of a male interviewer (Jachyra et al., 2014). Although I disclosed my civilian status to participants, in hindsight I possibly should have also named the gender difference in the room. It is possible that when I asked direct questions about masculinity, some participants felt as though they were being challenged, or the need to provide socially desirable answers (Emslie et al., 2006).

Overall however, reducing the researcher to either an “empathetic insider” or “ill-informed outsider” (Gair, 2012) can limit the nuances associated with either position; some people can be insiders in some ways and outsiders in others (Ochieng, 2010). Although I am outwardly an outsider in terms of veteran status and gender, I could have been considered an insider in ways not immediately identifiable to the participants, as discussed earlier. In hindsight, perhaps more consideration should have been given to naming similarities and differences during the interview.

Critical self-reflection

One critical aspect felt throughout the research process was the duality of roles as both a trainee clinical psychologist working for the NHS and a qualitative researcher. I very regularly felt the inclination to shift to a therapist role during the interview, along with the need to empathise or validate difficult experiences and provide further support. This is particularly considering that some participants had not outwardly spoken about their

difficulties before and had some shared frustrations around not receiving appropriate support from the NHS. As part of the procedure, I felt able to signpost some people to further support if needed (e.g., their local NHS Op Courage). I also noticed emotions in myself that in hindsight I recognise as transference: hearing the veterans' stories, feeling powerless in my interaction with them, and somewhat "unworthy" as a civilian having not put myself in the same position in serving my country. Such duality of roles was also evident during the coding process; I found myself often stuck when deliberating what could be classified under "normative transitions" versus "non-normative transitions". My eight years of experience working in various mental health settings likely meant that I was possibly impervious to the concept of "abnormal" experiences, and consequently realised the need to move past such a subjective interpretation by returning to what is evident in the data, privileging participants' voices (Charmaz, 2014).

The use of a broad interview guide as per GT stipulations to not force emergent themes onto the interviews (Charmaz, 2014) also relied on myself paying careful attention to meaning and extemporaneous initiation of follow-up questions, which meant that I was overall involved in a heightened sense of self-awareness (Arendell, 1997). Being engaged in the interactive, dialectical relationship with the participant I could be thought of as the fundamental primary research instrument (Denzin & Lincoln, 1994). However, I did often feel anxiety during the interview, which likely comes from lack of prior experience in conducting research interviews and fearing intimidation having researched an area I know relatively little about. This anxiety may have also created missed opportunities for further questioning or exploration during the interviews.

I also considered the experience of conducting qualitative interviews in light of my covert stammer, which is associated with a high degree of cognitive effort; for example, split

attention and word substitution to conceal anticipated disfluency. By not pre-informing participants or acknowledging this in the interview, I wonder if I missed an opportunity to disclose an area of vulnerability; disclosure may have enabled participants to feel more comfortable in disclosing their own vulnerabilities (Knox et al., 2001). Not acknowledging it also may have created some distance between myself and the participant; although my avoidance possibly mirrors the tendencies of veterans to also avoid talking about what they perceive as weaknesses, such avoidance possibly posed contradictory standards in expecting participants to share with me their own vulnerability.

Methodological critique

Quality of the grounded theory

Along with the earlier discussed quality criteria proposed by Glaser and Strauss (1967) in the methodology chapter, the four criteria of originality, credibility, resonance, and usefulness (Charmaz, 2014) were prioritised when discussing the methodological critique of the study. In reference to originality, the study identified a gap in the literature and aimed to explore the role of body image and masculinity in physical exercise participation in UK military veterans. Despite methodological limitations, the study proposes findings, both original and situated in the literature, offers clinical implications, and could lay the groundwork for future studies. It could be argued that there was dilution of the research aims arising from not specifying to participants that body image was the primary focus of the research. Thus, initial interview guides were possibly too broad. However, it is important to note that even in the first iteration, body image was a theme that was raised by participants before being directly asked, clearly showing its relevance.

Strategies to improve credibility of qualitative research include prolonged engagement with participants, triangulation, member checking, peer debriefing, and reflexivity (Treharne & Riggs, 2015). Whilst member checking was not utilised due to reasons explained in an earlier chapter (Charmaz, 2006), peer debriefing took the form of regular consultation with other researchers, along with reflexivity detailed throughout in the form of memos and post-interview reflections. Due to the study forming part of a professional doctorate thesis, the researcher solely analysed the interview transcripts. Although the quality criteria were regularly checked by the researcher, with the supervisor consulted about the validity of the coding and category decisions made, bias and subjectivity were monitored rather than completely eliminated (Walters, 2001). More time and resources may have enabled additional researchers for inter-coder reliability (O'Connor & Joffe, 2020). Additionally, although the researcher aimed to note non-verbal cues, it is likely that many would have been missed from the transcription. Research has suggested that whilst inclusion of such cues enhances the analysis, its interpretation is still subjective (Chitac et al., 2024).

Resonance demonstrates that concepts have been constructed that are representative of participants' experiences but also provide insight to others (Charmaz & Thornberg, 2020). The study utilised theoretical sampling, which meant that the researcher gained resonance by hearing the participants' stories from a new standpoint and revising the questions for later interviews (Lois, 2010). Data collection then ended once theoretical sufficiency had been achieved, in that the categories enabled sufficient understanding to generate a theory (Dey, 1999). This created a framework stipulating certain conditions that influenced the degree to which veterans associated with the military-masculine identity and subsequent transition experiences in the context of physical exercise, body image, and masculinity. Selected through purposive sampling, participants presented with a range of experiences before,

during, and post military service, and varied physical and/or mental health difficulties. Given that narratives shared by participants were co-constructed (Charmaz, 2014) and involved “the systematic abstraction and the conceptualisation of empirical data” (Hallberg, 2006, p143), another researcher may possibly form slightly alternative conclusions. This is not directly antithetical to the guidelines for GT; Glaser (1992) referred to the theory as a process and a momentary rather than finished product, suggesting that it will require further development and testing (Hallberg, 2006).

Usefulness encapsulates the clarification of participants’ understanding of their everyday lives, with the research applicable to both policy and practice, and contributing to new lines of research (Charmaz & Thornberg, 2021). The research has heard participants’ voices and construction of events over their lives to construct a theory, with clinical implications and suggestions for future research detailed later in this chapter

Sample constraints

All but one participant identified as White British; although suggesting an unbalanced ethnic sample, this is somewhat representative of the UK military veteran demographics, with 96.4% identifying as White, compared to 83.1% of the general UK population (ONS, 2023). Statistics were similar in terms of sexuality, with 91.3% of the military veteran population identifying as heterosexual, with some differences in religion; approximately half of the sample identified as having no religion, compared to 28.1% of the military veteran population (ONS, 2023). The sample was not representative of the UK veteran population in terms of age considering none were over the age of 80 and only two were over 60; 31.8% of UK veterans are over 80 and 53% over 65 years of age (ONS, 2023). It is therefore questionable whether the research is accurately representative; those above the age of 80 may have served during the National Service policy which came into force in 1949 until 1960 (UK Parliament,

2025). Those who were required to serve in the armed forces are likely to have had different experiences to those voluntarily enlisting, as suggested by the analytical framework of Moskos (1977), which refers to the differences in people driven by institutional values as opposed to occupational motivations. Potential differences in experiences according to age is also likely to reflect the deployments undertaken by veterans; in the current study, some participants identified significant differences in veterans that had served in different decades. This has also been suggested in the literature (Hotopf et al., 2006), meaning that future research might prioritise collecting a sample more age-representative of the UK veteran population.

Considering the research aims, age-related differences also extend to differing body image motivations; Drummond (2009) found younger men to be more critical of their bodies in terms of comparison with the archetypal male physique, along with prioritisation of the external mesomorphic appearance; older men were more likely to value having a functional body. Additionally, although the sexual orientation and ethnicity demographics may be representative of the UK veteran population, future research may benefit from exploration of how the dynamics of these additional variables affect perceptions of the male body (Wienke, 1998). The earlier discussed objectification theory has particular relevance to gay men, due to increased awareness and assessment of their masculinity within society from a young age (Drummond, 2005). In a similar vein, inconsistent findings concern body image across cultures; a review found men from a range of cultural groups exhibited more strategies to drive body change than white men (Ricciardelli et al., 2007), meaning that more varied findings may have constituted the study had a more ethnically diverse sample been sought.

Although not possible to circumvent considering voluntary participation is central to ethical practice, the sample is also subject to self-selection bias (Costigan & Cox, 2001). All

participants were motivated, open, and articulate in discussing their experiences, and many had a high level of introspection; some had been able to access therapy which they credited for this. For example, it is noted that childhood adversity was shared by some participants but not the majority; it may be that those previously faced with adversity would be unlikely to come forward (Bellis et al., 2024). The researcher was thus acutely aware of the stories not told by veterans less willing to participate (Littman et al., 2018). The researcher was also able to utilise contacts in the veteran field who were associated with charities, which would suggest increased readiness to help. In this respect, the military population is often challenging to recruit; the researcher was given feedback from a participant about his peers' wariness to participate due to suspicion of the motives of academics and the NHS. Research has echoed such barriers to veteran involvement, largely due to lack of trust with the research process (Littman et al., 2018), particularly for qualitative research (Bernthal, 2015) due to historical conduct of research tests and trials on military veterans without consent (Flynn et al., 2019).

For this reason, the researcher kept the inclusion criteria as broad as possible to encourage participation, however in doing so, the time since leaving the military was not specified. This meant that the sample included participants who had left less than six months ago, along with veterans with more time since leaving. This may have resulted in differing experiences considering the UK military has only been a peacetime army since 2014 (UK Parliament, 2014), meaning that not all participants shared combat experience, along with differing periods of time since leaving resulting in inaccuracies in memories and biases (Gemignani, 2014). Those who left more recently are also presumably earlier in the transition phase than those who left more than 10 years ago, which similarly may account for variations in transition stories told (Vogt et al., 2022).

Participatory action research

The researcher acknowledged that perhaps not sufficient effort was made to maximise opportunity for participatory action research, particularly prior to finalisation of the research aims. Despite attempts to rectify this by consultation with two military veterans and other veteran researchers during the recruitment stage (which involved revision of terminology used and reframing of the research advertisement), the time constraints associated with forming a research proposal for a professional doctorate meant a lack of collaboration with veterans and the possibility of research not being sufficiently dialogical (Paulus et al., 2008). Greater involvement with veterans at an earlier stage may also have led to a more representative sample, considering that trust can be built by veteran peers engaging directly with potential study participants as “insiders” (Ryan et al., 2011) in a way that the civilian academic researcher cannot. More time and funding available may have encouraged further veteran involvement which future studies could address, such as by using stakeholder or steering group participation (Anicich et al., 2022), which may also result in appropriate dissemination of findings upon completion of the research (Barker et al., 2022).

Cross-cultural considerations

It is acknowledged that the entirety of this paper comes from a Western lens, with little cross-cultural consideration. However, considering that the research aims were around body image and masculinity, with body image a typically Western construct (Dorian & Garfinkel, 2002), and in men, usually framed by Western masculine ideologies (Tylka, 2011), further studies of military cultures in other countries may need to use different constructs. As the notions of masculinity throughout this study refer to the “common constellation of standards and expectations associated with the traditional male role in the Western world” (Levant et al., 2007, p.84), it limits generalisability to other non-Western samples; however, it

also needs to be reiterated that military services will differ even across Western cultures (Cohen, 2019; Soeters & Recht, 1998).

Clinical implications

Military discharge and transition are both thought to be significantly misunderstood by researchers and civilians (Bergman et al., 2014), with the military considered one of the most difficult demographics to engage in mental health services (Blais & Renshaw, 2013). The tendency to stereotype military service to attempt to understand veterans' experiences may also result in further alienation and withdrawal from civilian services (Mittal et al., 2013), along with associations that “failed” transitions result in veterans being a burden to society (Bulmer & Eichler, 2017). It is therefore important to carefully frame research so that narratives of veterans can be understood, particularly considering the large number of service leavers transitioning relatively early in their life (Grimell & van den Berg, 2020). This study has produced a theory offering an understanding of the role of the body in the military, masculine context, along with how body image has been shaped by both earlier experiences and cultural and societal discourses; useful for clinicians, charities, and government organisations working with veterans. The following implications are offered in bullet point format to increase accessibility and impact (Ledin & Machin, 2015):

- Reframe masculinity practices in more positive, treatment-affirming ways that enable the person to seek support and take care of their mental health and wellbeing, such as through exercise and social connection. Certain outreach programmes across the UK have already implemented this, for example Moving Forces in North-West England in partnership with Sport England.

- Affirm peer support during the transition, as many participants spoke about the use of sport and physical activity to connect with other veterans, rather than being solely driven by body image motives. Although policymakers may wish to be aware of “counter narratives” regarding hyper-masculine practices (English, 2017), many participants shared that they no longer viewed exercise as a form of competition or metric by which to measure their masculinity or self-worth. Exercise was instead attributed as a coping mechanism and distraction amidst the contrast of civilian life, along with maintaining social connections.
- Encourage the facilitation of conversations in narrative environments; given the lack of prior psychological support for many participants, they reported that the interview had felt cathartic. The participants who were currently or had been historically in receipt of counselling had credited this with giving them a degree of introspection about their experiences relating to constructs including their body image and self-worth. This is supported by the *veteran paradox*, which encapsulates the benefit of adaptive counselling in the face of transition stress (Castro et al., 2015).
- Support processes to facilitate transition, mandated through the Veterans’ Strategy of the MoD, such as programmes encouraging the cultivation of life skills including housing, financial management, and other civilian requirements (Curry et al., 2017), along with work placement schemes prior to discharge (Fossey, 2013), to enhance cultural competence in civilian life (Cooper et al., 2017).

- For policymakers to be aware of language and terminology considering some participants raised reluctance around attending “support groups” due to non-identification with the term “support”. Considering the stigma attached to seeking mental health support or therapy, framing groups from another perspective (e.g., “coffee mornings” [Veterans Association, 2025]) can act as a support resource, combat loneliness and isolation through conversation and camaraderie with peers, and provide a link to the military past (McDermott, 2021). As echoed by a participant in the study, mindfulness of “veteran exclusivity” (Evans et al., 2020), as veteran-only activity could unintentionally produce dependence amongst veterans and further exclusion from civilian life (Blackshore & Long, 2005).

Future research

Further research on the transition experiences of veterans in the context of earlier childhood experiences is necessitated, as previous research appears to have prioritised understanding childhood trauma in the context of later-developed PTSD, as opposed to transition more generally (Van Voorhees et al., 2012). Military service is also often positioned as the defining activity of veterans’ lives, without enough consideration of life prior to adoption of the militarised identity (Heward et al., 2024). Further exploration of precipitating and formative experiences may therefore aid development of the theory. As described above, the time-associated restraints with sampling in the current study suggests that future research could prioritise collecting a more demographically representative sample age-wise, to investigate further any differences according to generation, decade of serving, or deployment/s undertaken. This may have influence on discussions around masculinity, considering that participants suggested more hegemonic notions of masculinity to be challenged in the face of more recent diversity and inclusion quotas (MoD, 2024). Hearing

stories from older veterans would also examine how the military identity is embodied and lived across the lifetime, for example using life history interviews, along with exploring how age affects body image in the context of adherence to masculine norms (Drummond, 2009).

Research would also benefit from exploration of how exercise and body image are negotiated in the female military veteran population, since the current study focused on masculinity frameworks, and most body image-oriented literature focuses on women (Grieve, 2007). Similarly, exploring earlier facets of individuals' lives would be helpful in this context considering research has found multiple traumatisation to be associated with eating disorder symptomology in female veterans (Arditte Hall et al., 2018). Replicating this study in other countries may also yield differences in findings, due to variation in how veterans are treated (Dandeker et al., 2006) and general differences in military culture between countries (Soeters & Recht, 1998). Likewise, examining the experiences of reservists may be beneficial considering better balancing of military and civilian lives, which ultimately allows for "smoother integration into civilian life than is currently possible for those who join early and stay longer" (Walker, 2013, p.299), along with reserves facing multiple transitions, rather than the "one-time-social rupture" of regulars (Walker, 2013, p.299). Exercise participation and body image in light of repeated transitions may also aid development of the theoretical model.

Conclusion

Overall, research must remain mindful of the danger of categorising veterans' experiences; veterans' identities are complex, ever shifting, and occasionally contradictory (Bulmer & Eichler, 2017). Despite this, the current study created a theory, grounded in the data, of three sequential points encapsulating the use of physical exercise for veterans, considering both body image and masculinity. Despite methodological limitations, this study aimed to contribute to the literature on the military-to-civilian transition by adding further detail regarding the physical self and body narratives of veterans. Findings highlight the importance of the theoretical framework in providing an informative context for healthcare providers in supporting veterans individually, in group settings, and in consultation and wider service delivery, along with policy development in broader government and charity sectors.

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Appendix A

Characteristics of studies included in the systematic review

Author/s, type of study	Review objective	Evidence source details and characteristics			Details/results extracted relevant to review aims		Summary of conclusions relevant to current review aims and quantitative results converted to a narrative description	MMAT quality rating
		Number	Sport type	Country	Body image measures / methodology used	Summary of findings related to review aims		
Quantitative								
Blouin & Goldfield (1995)	Test the hypothesis that bodybuilders are at risk for body dissatisfaction, and this may be associated with unhealthy or dangerous practices such as steroid use.	139	Bodybuilding, martial art, and running	Canada	From the Eating Disorder Inventory, subscales of Drive for Thinness (DFT), Body Dissatisfaction Scale (BDS), and Drive for Bulk (DFB)	Bodybuilders reported higher scores on Drive for Bulk ($F=43.34$; $df=2,133$; $p<0.001$), Drive for Thinness ($F=6.18$; $df=2,133$; $p<0.01$), and Body Dissatisfaction ($F=5.54$; $df=2,133$; $p<0.01$) compared to runners and martial artists. No significant differences were found between runners and martial artists on any of the body image measures. Bodybuilders also used steroids more frequently than martial artists and runners ($\chi^2=44.96$; $df=2$; $p<0.001$), especially those who were competitive ($\chi^2=14.2$; $df=1$; $p<0.001$).	Male bodybuilders exhibited a profile of body-related attitudes and other psychological characteristic seen in patients with eating disorders. Bodybuilders in general reported greater body dissatisfaction than other athletes. The high drive for bulk combined with the high drive for thinness reflects the bodybuilding culture of increases in bulk must be in the form of lean body mass, while maintaining low body fat.	Moderate
Devrim et al. (2018)	To determine the relationship between eating and body image-related disorders in male bodybuilders.	120	Bodybuilding	Turkey	Muscle Dysmorphia Disorder Inventory (MDDI), Bodybuilder Image Grid (BIG) – the BIG Original and the BIG Scaled	In the BIG, there was a statistically significant difference between current ($M=47.06$) and ideal ($M=28.96$) body fat mass scores ($p<0.01$). The BIG ideal muscle mass scores ($M=72.24$) were significantly higher than the BIG current muscle mass score ($M=54.31$), $p<0.05$. No difference between competitive and non-competitive bodybuilders for the BIG results. 58.3% of the sample had higher MDDI scores (.39), indicating high muscle dysmorphia symptoms. Total and all subscales of the MDDI scores and body	Bodybuilders have high symptomatology of both eating and muscle dysmorphic disorder.	High

Author/s, type of study	Review objective	Evidence source details and characteristics			Details/results extracted relevant to review aims		Summary of conclusions relevant to current review aims and quantitative results converted to a narrative description	MMAT quality rating
		Number	Sport type	Country	Body image measures / methodology used	Summary of findings related to review aims		
						image/dissatisfaction scores according to BIG O and BIG S scales were significantly higher in bodybuilders with eating disorders ($p < .05$). Regression analysis shows that an eating disorder was a relative risk factor for muscle dysmorphia symptoms and muscle-related body satisfaction ($p < 0.001$).		
Edwards et al. (2016)	To examine if there were direct and indirect relationships (via the drive for muscularity) between the perceived pressure to be muscular and internalisation of the mesomorphic ideal, and if autonomy moderates these relationships in physically active men.	330	Athletes engaging in soccer, rugby, basketball, and weight training	United Kingdom	Drive for Muscularity Scale (DMS), Perceived Sociocultural Pressure Scale-Modified (PSPS-M), Internalisation subscale of the Sociocultural Attitudes Toward Appearance Scale (SATAQ-IR)	The internalisation of the mesomorphic ideal physique was significantly positively correlated with the drive for muscularity ($M=3.46$, $p < 0.05$), and perceived pressure ($p < 0.05$). The drive for muscularity was also significantly positively correlated with perceived pressure ($p < 0.05$). Autonomy was significantly negatively correlated with perceived pressure ($p < 0.01$). Both pressure ($p < 0.001$) and drive for muscularity ($p = 0.003$) significantly predicted internalisation of the mesomorphic ideal and the relationships were positive. The interaction terms indicated that these relationships were both significantly moderated by autonomy ($p < 0.05$). Higher levels of autonomy were associated with a weaker direct relationship between pressure and the internalisation of the mesomorphic ideal ($p < 0.001$), and that the indirect pathway between pressure and internalisation through the drive for muscularity was also moderated by autonomy. Higher levels of autonomy were associated with a stronger positive indirect relationship between pressure and internalisation through the drive for muscularity.	Autonomy and drive for muscularity are related to internalisation of the muscular ideal. Drive for muscularity and social pressure are correlated with internalisation of the mesomorphic ideal. The relationship between pressure and internalisation is weaker under higher levels of autonomy. Men who were less self-determined were more likely to accept social messages and internalise them than those more self-determined (autonomous).	Moderate

Author/s, type of study	Review objective	Evidence source details and characteristics			Details/results extracted relevant to review aims		Summary of conclusions relevant to current review aims and quantitative results converted to a narrative description	MMAT quality rating
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Galli et al. (2015)	To examine the simultaneous relation of general and sport-specific pressures about body weight and shape, negative affect, and body satisfaction to drive for muscularity in male collegiate athletes.	183	Division I athletes, including sports such as football, basketball, cheerleading, golf	United States	Drive for Muscularity Scale, Weight Pressures Scale for Athletes, Body Parts Satisfaction Scale-Revised	The final model for the muscularity behaviours regression analysis was significant, $F(7,175)=9.98$, $p<.0001$, Adj. $R^2=0.26$; athletes' BMI ($\beta=.18$, $p=0.008$), sport pressures ($\beta=.28$, $p=0.002$), and negative affect ($\beta=0.23$, $p=0.001$) predicted greater engagement in behaviours focused on increasing muscularity. Further, athletes who participated in non-lean sports ($\beta=0.165$, $p=0.01$) endorsed engaging in muscularity-related behaviours more strongly than did those from lean sports. For muscularity-oriented body image, the final model also was significant, $F(5,175)=14.60$, $p<0.0001$, Adj. $R^2=0.34$; sport pressures about body size and weight ($\beta=0.22$, $p=0.01$), satisfaction with body size and shape ($\beta=-0.33$, $p<0.0001$), and negative affect ($\beta=0.13$, $p=0.05$) predicted the athletes' endorsing a body image that was focused on muscularity. Sport type (i.e., lean vs. non-lean) was not a significant predictor ($p>0.05$).	Sport pressures, negative affect, and body satisfaction were all significant cross-sectional predictors. Sport pressures about body shape and weight were related to both drive for muscularity dimensions (behaviours and body image). Negative affect was related significantly to both drive for muscularity behaviours and body image, likely to be connected to the hyper-masculine culture of collegiate athletes where displays of muscularity, strength, and power are symbols of being a man. Body dissatisfaction was related to a more muscular-oriented body image. When men view their bodies as not matching societal and sport ideals, they may experience dissatisfaction and believe obtaining a muscular body is necessary.	High
Galli et al. (2017)	To examine the weighing status of male athletes in relation to their internalisation of body ideals, social pressures about weight/body, body	744	Male collegiate athletes including sports such as baseball, cross-country,	United States	Perceived Sociocultural Pressure Scale, Sociocultural Attitudes Toward Appearance Questionnaire-3, Body Parts Satisfaction Scale for	No other findings aside from differences in BMI between people who had team weigh-ins. The ANCOVA for dietary intent, $F[2, 740]=5.83$, $p=0.003$, partial $\eta^2=0.015$, and the MANCOVA for the two drive for muscularity variables, Wilks' $L=0.96$, $F(4,1478)=6.66$, $p<0.0001$, partial $\eta^2=0.018$, showed small but	Although team weighing was unrelated to most of the eating and body image variables, athletes on teams that conducted weigh-ins did report more muscularity behaviours and dietary restraint than those not subjected to team weighing.	High

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	satisfaction, dietary restraint, negative affect, drive for muscularity, and bulimic symptomology.		football, swimming		Men, Drive for Muscularity Scale	significant effects, though only muscularity behaviours varied based on team weigh-ins. Small to medium effects for caloric restriction were found when comparing the athletes who were weighed weekly (Madj=1.92, SE=0.08) were more likely to those who were not weighed (Madj=1.63, SE=0.03, Cohen's d=-0.49) or who were weighed monthly (Madj=1.62, SE=0.09, Cohen's d=-0.38). Small to medium effects were found for muscularity behaviours when comparing athletes who were weighed monthly (Madj=3.16, SE=0.13, Cohen's d=0.47) or weekly (Madj=3.11, SE=0.12, Cohen's d=0.43) to the non-weigh-in group (Madj=2.71, SE=0.05). Self-weighing frequency was unrelated to the athletes' body satisfaction and negative affect. The remaining MANCOVAs and ANCOVAs revealed small but significant effects between self-weighing frequency and sociocultural pressures.	Required weigh-ins may encourage male athletes to engage in efforts to alter their body's appearance whether by building muscle and/or restricting nutritional intake. Weighing three times per week was related to increased pressures about leanness and muscularity and associated with greater drive for muscularity. Furthermore, self-weighing seven times per week (daily or more) appeared to increase risk, resulting in athletes being more likely to internalize societal body ideals, restrict calories, and develop bulimic symptomatology.	
Gibson et al. (2019)	To investigate the relationship between eating disorders, body image, and age in elite rugby union players during their preseason training period	26	Elite rugby union players	New Zealand	Body Image and Eating Behaviour Questionnaire (from the Low Energy Availability Amongst New Zealand Athletes questionnaire)	Highest score on the body dissatisfaction scale was 25/40. Regularity of binge eating episodes positively associated with body dissatisfaction (p=0.013). Being told they had to lose weight had no effect on body image scores (p>0.05). No significant difference between actual and desired body mass (p=0.401).	Rugby union players are heterogenous in subjective view of their body shape, with variations in body image and desired weight change observed. Participants appeared to have the tall muscular body shape considered "ideal" by society, and their perception of themselves was generally congruent to their body composition.	Moderate

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Goltz et al. (2013)	To identify disordered eating behaviours and body image dissatisfaction and their relationship to body fat percentage among male athletes in high risk sports for eating disorders.	156	Weight-class sports e.g. martial arts and rowing, leanness sports e.g. athletics, swimming, aesthetic ideal sports e.g. ballet, dance, gymnastics	Brazil	Body Shape Questionnaire (BSQ) – translated Brazilian version	Body image dissatisfaction scores (>81) identified in 14.7% of the athletes, with no significant difference in body image satisfaction between the three categories of athlete ($p>0.05$). Athletes with body image dissatisfaction had a higher body fat percentage than those who were satisfied with their own image ($p=0.034$).	More than half of the 43 athletes with disordered eating behaviour scores were dissatisfied with their body image. Lower prevalence of body image dissatisfaction in this study than those with disordered eating. Athletes with a higher body fat level may feel they do not meet the ideal body shape for their sport – either too fat or not muscular enough.	Moderate
Hale et al. (2010)	To assess weightlifters on exercise dependence and drive for muscularity according to age, the type of weightlifting, and whether drive for muscularity can predict risk of exercise dependence.	147 (59 bodybuilders, 47 powerlifters, 40 fitness lifters)	Weightlifting	United States	Drive for Muscularity Scale (DMS), Exercise Dependence Scale, Bodybuilding Dependence Scale	A significant main effect for groups was found for total scores, $F(2,97)=3.23$, $p<0.05$, $\eta^2p=0.06$, with post hoc Tukey tests indicating that power lifters ($M=3.93$) scored significantly higher in drive for muscularity than bodybuilders ($M=3.14$). For Muscle Development Behaviours (MB) scores, a significant main effect for groups was calculated, $F(2,97)=4.23$, $p<0.05$, $\eta^2p=0.08$, and post hoc tests again showed that power lifters ($M=3.80$) scored higher in behaviours toward the drive for muscularity than bodybuilders ($M=2.99$). For Muscularity Oriented Body Image Attitude (MBI) scores, no significant main effect for groups was computed. The regression equation was found to be significant, $y = 4.71\chi + 88.11$, $R^2(98)=0.10$, $p=0.002$. A standard multiple regression was also calculated using the two DMS subscales (minus item #10) to test the prediction of exercise dependence Total scores. Again, an overall significant regression equation occurred, $y =$	Bodybuilders and power lifters were equally higher in exercise dependence scores than self-labelled fitness lifters, with no difference between them. Powerlifters scored higher than bodybuilders for drive for muscularity, however with a small effect size. It was suggested that perhaps after years of achieving goals of lifting for size and increased muscularity, experienced bodybuilders feel more satisfied about their muscularity, and their drive is reduced; whilst powerlifters may continue to be ‘wannabes’ who push themselves to be more muscular because they are	High

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Hallsworth et al. (2005)	To apply objectification theory to male bodybuilders to explore the potential underlying mechanism that leads bodybuilders to have high levels of body-image and eating disturbance.	83	Bodybuilders (31), competitive weightlifters (17), control participants (35)	Australia	Self-Objectification Questionnaire (SOQ) – 10-item version, Body Consciousness Scale (BCS) with two subscales – Body Surveillance and Body Shame, Appearance Anxiety Scale (AAS), Drive for Muscularity Scale (DMS)	89.59–4.60MB - 0.64MBI, R^2 (97) =0.10, $p=0.01$, with neither subscale able to predict EDS alone. There was a significant difference between the groups with respect to both self-objectification and self-surveillance. Bodybuilders experienced significantly higher levels of self-objectification than weightlifters and controls, indicating that bodybuilders placed greater emphasis on the importance of appearance regarding their self-concept, whereas weightlifters and controls rated competency as being more important to their self-concept. In contrast, bodybuilders and controls were more similar with respect to self-surveillance, and weightlifters were significantly less likely to experience body monitoring than controls. Body shame and appearance anxiety were not found to be significantly different between the groups. Bodybuilders did report significantly higher levels of body dissatisfaction and drive for muscularity than control participants. ANCOVAs for body dissatisfaction and drive for muscularity as the respective outcome variables, controlling for both BMI and self-objectification. There was no longer a significant difference between groups for body dissatisfaction, $F(2,78)=2.82$, $p=0.07$, but the significant difference remained between the groups for drive for muscularity, $F(2,78)=4.47$, $p=0.02$, with bodybuilders experiencing significantly higher levels of drive for muscularity than controls. Self-objectification was significantly associated with all variables	unsatisfied with their strength and lifting gains. Male bodybuilders have significantly higher levels of body dissatisfaction and drive for muscularity than male controls, and the group of weightlifters was not notably different from the control group on any of the body-image and eating measures. Consistent with the theory that self-objectification (or defining oneself in terms of appearance rather than competency) can explain why bodybuilders experience more disordered eating than controls. Not only did bodybuilders experience significantly higher levels of self-objectification than other men (including weightlifters), but self-objectification also explained the higher levels of body dissatisfaction experienced by the bodybuilders compared with controls. However, controlling for self-objectification did not remove the significant differences between the bodybuilders and controls on drive for muscularity, indicating that this variable is also strongly influenced by other	High

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						except bulimia, sharing the strongest correlations with self-surveillance ($r=0.52$, $p<0.001$), and drive for muscularity ($r=0.44$, $p<0.001$). Self-surveillance was also significantly correlated with all the variables ($p<0.05$) except bulimia. Body shame and appearance anxiety were significantly correlated with all variables, where body shame was most strongly correlated with drive for muscularity ($r=0.47$, $p<0.001$) and appearance anxiety was most strongly correlated with body dissatisfaction ($r=0.58$, $p<0.001$).	sources of variance (possibly perfectionism).	
Harmancı & Okray (2021)	Determine the muscle dysmorphia, narcissistic characteristics, and body dissatisfaction of men who are engaged in bodybuilding sports.	140 (70 bodybuilders and 70 sedentary males)	Bodybuilding	Turkish Republic of Northern Cyprus	Body Image Scale (BIS) – Turkish version, Muscle Dysmorphic Disorder Inventory (MDI)	Bodybuilders had a significantly higher score on the BIS than the sedentary males, 164.51 compared to 156.20 ($p=0.026$) and on the MDI, 31.81 compared to 24.02 ($p<0.001$). This included a significantly higher score on the Desire for Size subscale (13.22 compared to 9.62), $p<0.001$). There was also a significant difference in the Functional Impairment subscale, with bodybuilders having a score of 11.19 compared to 7.03 ($p<0.001$). However, no significant difference in scores on the Appearance Intolerance scale (7.40 compared to 7.37, $p=0.864$).	A strong negative relation was found between body image and body desires of bodybuilding men, in that inadequate perception of physical size and strength is negatively related to body satisfaction. Inconsistency between the real bodies of individuals and their perceived bodies in muscle dysmorphia, which leads to body dissatisfaction.	High
Killion & Culpepper (2017)	Examine the body perceptions of collegiate Division I male athletes.	94	Division I college athletes from football, basketball, and baseball	United States	Multidimensional Body Self-Relations Questionnaire (MBSRQ-AS)	Baseball players had significantly lower scores on Appearance Evaluation ($F(2,91)=6.50$, $p=0.002$), Appearance Orientation ($F(2,91)=9.84$, $p<0.001$), and Body Areas Satisfaction Scale ($F(2,91)=20.61$, $p>0.001$), compared to their football and basketball peers. No ‘disturbed’ attitudes towards food ($p>0.05$).	Football and basketball players were satisfied with their size, and baseball players showed less body satisfaction. Presented the latter as having a dilemma of wanting to gain strength, but not wanting to sacrifice lightness and speed. Baseball players also wanted to	Moderate

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						ANOVAs documented differences between Body Area Satisfaction, Appearance Evaluation [$F(2,91) = 6.50, p = .002$], and Appearance Orientation [$F(2, 91) = 9.84, p$	increase upper body size compared to football and basketball players. Related this to masculine norms of having muscles contained in the “arms, chest, back, biceps, and triceps”.	
Petrie & Moore (2023)	Document the point prevalence of body satisfaction and disordered eating behaviours in male athletes in the months post COVID-19 being declared a global pandemic, and determine the predictive utility of different dimensions of body satisfaction for understanding disordered eating symptomology.	1975	Division I, II and III athletes from sports including baseball, football, soccer, track and field, basketball, lacrosse, swimming and diving, cross country, tennis, golf, wrestling, and rowing	United States	Body Parts Satisfaction Scales (BPSS), measured on five dimensions: overall body size and shape, leanness and muscle definition, body muscularity, body thinness, and current weight.	For Body Satisfaction point prevalence was: thinness (59.7%, BCa 95% CI [0.576, 0.617]), overall size/shape (63.4%, BCa 95% CI [0.612, 0.655]), leanness and muscle definition (59.6%, BCa 95% CI [0.576, 0.616]), muscularity (68.5%, BCa 95% CI [0.665, 0.706]), and current weight (62.0%, BCa 95% CI [0.599, 0.639]). Athletes were significantly more satisfied with their muscularity than all other dimensions; particularly with overall body than leanness or thinness. the inclusion of the five BS dimensions was significant, $F(5,1959)=201.791, p<0.001$. Of the Body Satisfaction dimensions, three were significant: overall body size/shape ($B=-1.02, 95\% \text{ CI } [-1.402, -0.632], \beta=-0.19, p<0.001$); current weight ($B=-1.07, 95\% \text{ CI } [-1.397, -0.733], \beta=-0.22, p<0.001$); and thinness ($B=-1.20, 95\% \text{ CI } [-1.541, -0.857], \beta=-0.25, p<0.001$). More satisfaction with current weight, body size/shape, and thinness was related to less disordered eating; thinness satisfaction had the strongest effect.	Across the five dimensions, 60-70% of athletes were satisfied, with highest satisfaction associated with muscularity and the least satisfaction with leanness and thinness. Body satisfaction significantly explained the athletes' disordered eating symptomology during the COVID-19 transition. Satisfaction around weight, body size/shape, and thinness played central roles in determining whether the athletes' engagement in, and relationship to, eating and food was healthy.	High
Pickett et al. (2005)	To investigate body image and psychosocial adjustment among	120	Competitive bodybuilders, non-competitive	United States	Multidimensional body self-relations questionnaire (MBSRQ), Social	Groups differed reliably on appearance evaluation: $F_{2,117}=12.13, p<0.001, \eta^2=0.17$. Both competitive bodybuilders and weight trainers reported a significantly more positive	Even though the competitive bodybuilders had greater fat-free body mass (muscularity) than the other two groups, they	Moderate

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	competitive bodybuilders, non-competitive weight trainers, and athletically active men.		weight trainers, athletically active men		physique anxiety scale (SPAS)	evaluation of their appearance than did the athletically active controls. The effect on the SPAS was marginal: $F_{1,117}=2.57$, $p=0.061$, $\eta^2=0.05$. Controls reported only slightly more social physique anxiety than the other groups. A higher ideal weight was desired by 88% of competitive bodybuilders, 75% of weight trainers, and 50% of active controls. An analysis of variance on the signed self-ideal weight discrepancy scores (ideal minus current weight) indicated significantly greater weight gain desires by the bodybuilders than the active controls ($F_{2,117}=9.43$, $p<0.001$, $\eta^2=0.15$). Bodybuilders' weight gain desires were only marginally higher than those of weight trainers ($p<0.08$), whose ideals were only marginally higher than those of active controls ($p<0.09$). Reliable group effects were observed on three pertinent areas of body satisfaction: satisfaction with mid torso, upper torso, and muscle tone, $F_{2,117}=5.83$, 5.19, and 6.80 respectively and $p<0.01$, $\eta^2=0.09$, 0.08, 0.10 respectively. Group differences did not occur on satisfaction with lower torso ($p<0.08$) or weight ($p<0.69$). Bodybuilders and weight trainers were more satisfied with their muscle tone and upper torso than active control participants ($p<0.05$). Bodybuilders were also more content with their mid torso than were weight trainers or controls ($p<0.01$), who did not differ. A significant group effect was found on the MBSRQ appearance orientation measure of the extent of cognitive behavioural investment in	wished to weigh an average of 17.2 pounds more in muscle mass, and significantly more compared with controls. Both competitive bodybuilders and regular weight trainers held more favourable overall views of their physical appearance than athletically active controls. The former two cohorts also reported marginally less physique anxiety. Both bodybuilders and weight trainers were more satisfied with their upper torso and their body's overall muscle tone than active controls. Both competitive bodybuilders and non-competitive weight trainers reported more cognitive behavioural investment in their physical appearance than did active controls. Men who compete in public competitions were no more invested in their appearance than non-competitive weight trainers. Weight training rather than competition appears to be associated with greater satisfaction with muscularity. Higher social self-confidence may be a consequence of having the mesomorphic body ideal and as such, public display of such a	

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						one's appearance ($F_{2,117}=4.80$, $p<0.01$, $\eta^2=0.08$). Both competitive bodybuilders and non-competitive weight trainers were more appearance invested than active controls ($p<0.05$).	body but this comes with it a degree of eating restraint.	
Satterfield & Stutts (2021)	Examine the nature of drive for muscularity, body satisfaction, and disordered eating in collegiate wrestlers, and investigate which sociocultural influences most strongly predicts drive for muscularity, body satisfaction, and disordered eating	103	Division I collegiate wrestlers	United States	Perceived Sociocultural Pressure Scale (PSPS), Weight Pressures in Sports Scale for Male Athletes (WPSC-mA), Drive for Muscularity Scale (DMS), Body Parts Satisfaction Scale for Men (BPSSM)	Participants showed a moderate to high drive for muscularity ($M=3.4$), and moderate to high overall body parts satisfaction ($M=4.3$). The highest body parts satisfaction was the face ($M=4.55$, $SD=0.96$), then upper body ($M=4.29$, $SD=0.87$), and the lowest was legs ($M=4.13$, $SD=1.07$). Drive for muscularity was negatively associated with body satisfaction ($r=-0.60$, $p<0.006$), and positively associated with binge eating ($r=0.39$, $p<0.006$) and restricting behaviour ($r=0.40$, $p<0.006$). Body satisfaction was negatively associated with restricting behaviour. Sport appearance pressures ($R^2=0.14$) followed by general pressures ($R^2=0.11$) were the strongest predictors of drive for muscularity ($p<0.05$). General pressures ($R^2=0.14$) followed by sport appearance pressures ($R^2=0.13$) were the strongest predictors of body satisfaction ($p<0.05$). Coach /teammate pressures were not a significant predictor of drive for muscularity and body satisfaction ($p>0.05$).	The drive for muscularity in collegiate wrestlers is higher than that of a general college male sample. Drive for muscularity is negatively associated with body satisfaction and positively associated with binge eating and restricting. Cognitions about muscularity appear related to unhealthy behaviours. Moderate to high body satisfaction was reported, aligning with other research showing there to be no difference between wrestlers and non- wrestlers. Coaches and teammates play a key role in influencing a wrestlers' body weight. Sport appearance pressures and then general pressures were predictors of drive for muscularity, due to the importance of strength related to performance in wrestlers. General pressures salient due to the pressure on athletes to strive for a certain body type derived from images of men in the media.	Moderate

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Atkinson (2011)	To understand ‘emaciation’ from the perspective of male athletes, including lived experiences, social constructions, and the athlete’s own suggestions for intervention, policy initiatives, or education programmes in sport regarding emaciation and its outcomes	73	Long-distance runners, triathlon, rowers, wrestlers, gymnasts, swimmers, skiers, volleyball, tennis – all engaging in some form of restrictive eating or overexercise	Canada	Semi-structured interviews	Eleven conceptual themes found in the interviewees’ narratives: class-attitudes and work orientations; educational perspectives; authoritarian bonding: thin as biological habit; feeling thin; inner-restraint and emotional control; self-efficacy; shame, guilt, and embarrassment tolerance: social insulation within sport cultures; ethno-nutritionism and groupthink; and thinergy. These were bracketed into four separate categories: 1 Social establishment (linking their bodies with normative societal expectations and ideologies); 2 Biological phenomenology (the men had life histories of being thin and focus on image and shape, rather than this being a result of athletic involvement); 3 Repugnance thresholds (exposure to the shame and embarrassment discourses in Western culture – men feel shamed by uncontrolled bodily behaviours and images); and 4 Corporalis hyperbole (hyperbolic beliefs within the sporting culture about why the body should be emaciated from time to time)	Regular tactical periods of intense weight loss seem to fit into their culture from different perspectives: biologically and socioculturally both within and outside of sport. Ideological mindsets about the body appear to crystallise early in life for periodic slimming to be deemed as normative and preferable. Lessons learned about the body, its discipline, ability to work, and appropriate pedagogy are gleaned within familial and school networks, and then amplified in particular sports cultures.	Moderate
Galli & Reel (2009)	Explore how competitive male athletes feel about their bodies and how participation in sport influences body image	10	Competitive athletes	United States	Semi-structured interviews	Six general dimensions described the body image experience of the athletes: a) wide-ranging impact of sport on body image (athletes engaging in body comparisons, pressure from coaches, teammates’ influences, and uniform pressure), b) sociocultural body image influences (coming from significant others, religion, females, and media), c) body dissatisfaction (80% of athletes reported dissatisfaction around certain aspects of their physique, around appearance, weight, and	Male athletes were simultaneously proud and self-critical of their bodies (some shared wanting to be taller, heavier, or stronger). Related this to muscular bodies representing a masculine ideal, and the athletes training to a high level feeling as though they more closely fit this. The complex nature of	High

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						functional/performance), d) body-enhancing behaviours (sociocultural and sport context influenced the measures taken to improve their body – approaches to lifting, dietary strategies, efforts to gain weight), e) positive feelings about one's body (70% of athletes discussed feeling positively about their bodies, some rejecting stereotypical conceptions of the ideal male body), and f) positive consequences of achieving the ideal body (psychological benefits, what it means to have the ideal male physique, and the importance of projecting an image to opponents)	competitive sport is likely to lead athletes to feel both high self-esteem and a certain degree of body dissatisfaction. Some behaviours otherwise deemed as pathogenic are seen as normal or a necessary part of being an athlete. Males also downplayed the significance of attaining the ideal male body; those who do not feel their bodies fit with the traditional concepts of the ideal body are more likely to reject this ideal.	
Nelson & Jette (2022)	Examine the meanings and values held about weight gain, weight loss, muscle mass and body fat by male Olympic weightlifters, examine if these are inherent to the sport culture itself or drawn from other sources such as gendered and health discourses, and how the bodily practices of male weightlifters are	8	Olympic weightlifters	United States	Semi-structured interviews (thematic analysis and poststructuralist discourse analysis)	Themes found around the body culture in Olympic weightlifting (emphasising functionality rather than what it looks like), discursive framings of body fat and strength (athletic discourse: theoretically useful, practically-useless body fat), male body ideals: ugly body fat, dominant health discourses: unhealthy, inefficient body fat), bodily practices to avoid fat (manipulating weight done through training practices as opposed to diet, primarily through hypertrophy and neuromuscular control, the latter preferred)	Athletes drew on multiple and oppositional discourses to strategize their bodily practices. Framed choice of weight class and body composition around sport-specific structural incentives and boy culture. Appeared to be some contradictions to beliefs, for example believing body fat had a positive relationship to weightlifting performance, but less certain of the mechanics underlying this. This lack of understanding reinforced the need to prioritise training methods that would avoid mass gain, a strategy becoming dysfunctional if they	High

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	shaped according to these discourses						remained in their weight classes for too long.	
Mixed methods								
Cafri et al. (2008)	Examine the differences between males meeting criteria for muscle dysmorphia and a group of weightlifting controls using a case-control design.	51	Weightlifting	United States	Muscle Appearance Satisfaction Scale (MASS), Muscle Dysmorphic Disorder Inventory (MDDI), Body dysmorphic disorder diagnostic module interview, Body dysmorphic disorder modification of the Yale-Brown Obsessive Compulsive Scale, Muscle Dysmorphia Symptom Questionnaire	Those with muscle dysmorphia thought about their muscle size ($t=3.8$, $p=0.002$) and checked their appearance in mirrors ($t=3.68$, $p=0.006$) and on scales ($t=3.56$, $p=0.002$) significantly more than controls. On the Muscle Appearance Satisfaction Scale, individuals with muscle dysmorphia were found to have greater muscle dissatisfaction ($t=2.83$, $p=0.006$), appearance checking ($t=3.83$, $p<0.001$), and bodybuilding dependence ($t=4.18$, $p<0.001$) as well as more functional impairment based on the MD Disorder Inventory—Functional Impairment Subscale ($t=7.86$, $p<0.001$). Higher rates of eating disorders, non-muscle related body dysmorphic disorder, any steroid use, and steroid abuse/dependence were not observed in the muscle dysmorphia group relative to controls ($p>0.05$).	Individuals with muscle dysmorphia are distinct from normal weightlifters in their symptom pathology and psychiatric comorbidity. The former often thought about their muscularity, were dissatisfied, appearance-checked, were dependent on bodybuilding, and were functionally impaired.	High
Fasczewski et al. (2022)	To examine the relationship between perceptions of masculinity and body image to eating disorder risk	63	Collegiate wrestlers	United States	Multidimensional Body-Self Relations Questionnaire, and three open-ended response items (what it means by masculinity, what it	Risk of eating disorders was positively correlated to appearance self-importance ($r=0.361$, $p<0.01$) and body weight vigilance ($r=0.618$, $p<0.01$) and negatively correlated to body image satisfaction ($r=-0.328$, $p<0.05$). Gender self-acceptance was correlated to lower importance placed on body image ($r=0.402$, $p<0.01$). Those completing the	Wrestlers experience higher overall body image satisfaction, emphasising body weight and size as part of the sport. Beliefs aligned with typical Western masculinity norms, indicating some relationship between body	High

Author/s, type of study	Review objective	Evidence source details and characteristics			Details/results extracted relevant to review aims		Summary of conclusions relevant to current review aims and quantitative results converted to a narrative description	MMAT quality rating
		Number	Sport type	Country	Body image measures / methodology used	Summary of findings related to review aims		
	in male collegiate wrestlers				means to be a wrestler, and what specific methods to achieve success in off-season)	MBSRQ-AS reported lower scores than the observed population mean on the <i>Appearance Orientation</i> subscale (3.15 ± 0.59 ; $t(57) = -5.81$, $p < 0.01$), normal scores compared to the observed population mean on the <i>Weight Self-Classification</i> subscale (3.01 ± 0.46 ; $t(58) = 0.943$, $p = 0.350$), and higher scores than the observed population mean on the <i>Appearance Evaluation</i> subscale (3.91 ± 0.56 ; $t(57) = 5.68$, $p < 0.01$), <i>Body Areas Satisfaction Scale</i> (3.77 ± 0.66 ; $t(57) = 3.17$, $p < 0.01$), and <i>Overweight Preoccupation</i> subscale (2.88 ± 0.88 ; $t(56) = 3.52$, $p < 0.01$). Qualitative data showed similarities in traits associated with successful wrestlers and the traditional ideal male (mental and physical strength, toughness, surpassing limits).	image and masculinity (traditional hemogenic male features were described, including facial features, physical strength, and lean muscularity.	
Pinto et al. (2020)	To investigate the prevalence of symptoms related to eating disorders / disordered eating and body image dissatisfaction, and to explore attitudes towards eating and body image perception in elite male artistic gymnasts	17	Gymnasts (seven at an international level and 10 at a national level)	Brazil	Male Body Checking Questionnaire (MBCQ), a muscle-based silhouette measure (MSM), focus groups	87.5% of athletes desired a larger, stronger body shape. Mean body satisfaction score of -1.13. Qualitative data showed that body image perception varied widely. Some with negative perceptions wanted to lose weight (the most cited factor). At odds with data from the MSM, where most athletes reported a desire to be larger/stronger. Others appeared less concerned with weight, focusing more on strength, performance, and vitality. Negative associations with having excess body fat for injury-related reasons. Some believed it was not possible to be lean and strong at the same time.	Little evidence for symptoms consistent with an eating disorder, however from focus groups, concerning attitudes and beliefs around body image (although believed to be subclinical). Many athletes had positive perceptions of their own bodies and emphasised strength, performance and vitality over body composition and strength, whereas some athletes had more negative perceptions and wanting to become leaner and stronger (they considered their own body	High

Author/s, type of study	Review objective	Evidence source details and characteristics			Details/results extracted relevant to review aims		Summary of conclusions relevant to current review aims and quantitative results converted to a narrative description	MMAT quality rating
		Number	Sport type	Country	Body image measures / methodology used	Summary of findings related to review aims		
Steinfeldt et al. (2011)	Examine muscularity within a functional context by assessing the experiences of football players for whom muscularity serves the purpose of maximising performance and minimising injuries (i.e. exploring the relationship between masculine norms, identification with the athlete role, and drive for muscularity)	197	College football players (American football)	United States	Drive for Muscularity Scale (DMS) with qualitative element (“Reasons for being muscular”) – three open-ended questions	DMS scores were significantly correlated with many of the subscales in the masculinity questionnaire: winning ($r=0.22$, $p<0.01$), emotional control ($r=0.31$, $p<0.001$), risk-taking ($r=0.21$, $p<0.01$), violence ($r=0.20$, $p<0.01$), self-reliance ($r=0.25$, $p<0.001$), and heterosexual self-preservation ($r=0.24$, $p<0.01$). Not all subscales in the masculinity questionnaire were related to the DMS. Athletic identity was significantly related to DMS ($r=0.33$, $p<0.001$). The qualitative results showed that External Gratification was the most frequent answer (57%) to the question “Why do men want to be muscular?” followed by functionality (21.2%), internal gratification (10.0%) and health (7.5%). Functionality (43.3%) was the most common answer to the question “Why do you want to be muscular?”, followed by external gratification (30.7%) and health (15%). In response to the question “What are the benefits of being muscular?” the most common answer was External gratification (38%), followed by Functionality (34.3%), health (15.7%) and internal gratification (9.9%).	Only some scales of the masculinity questionnaire were related to the DMS and could predict drive for muscularity, including risk taking, emotional control, and primacy of work. Risk taking could be connected to the decision to take steroids for performance. The more the football player identifies with his athletic identity, the more he desires to be muscular. Also functional for football players. Also, positive and adaptive aspects (e.g. diligence, self-discipline, commitment) to identifying with the athlete role and desire for muscularity. Muscularity related to sport performance but also acknowledged socio-cultural messages linking masculinity and muscularity, putting pressure on men to conform their bodies to these standards.	Moderate

*Findings of significance to the review question were recorded. For quantitative studies, this included percentages, statistical significance, etc. For qualitative studies, this included themes or subthemes. Mixed methods studies included both forms of data.

References of all scales:

- Eating Disorder Inventory (Garner et al., 1983).
- Muscle Appearance Satisfaction Scale (Mayville et al., 2002).
- Muscle Dysmorphic Disorder Inventory (Hildebrandt et al., 2004).
- Body Dysmorphic Disorder Diagnostic Module Interview (Rosen & Reiter, 1996).
- Body Dysmorphic Disorder – modification of the Yale-Brown Obsessive Compulsive Scale (Phillips et al., 1997).
- Muscle Dysmorphia Symptom Questionnaire (Olivardia et al., 2000).
- Bodybuilder Image Grid (Hildebrandt et al., 2004).
- Drive for Muscularity Scale (McCreary & Sasse, 2004).
- Perceived Sociocultural Pressure Scale (Stice et al., 1996).
- Perceived Sociocultural Pressure Scale-Modified (Tylka, 2011).
- Sociocultural Attitudes Towards Appearance Scale (Thompson et al., 2004).
- Weight Pressures in Sports Scale for Male Athletes (Galli et al., 2011).
- Weight Pressures Scale for Athletes (Petrie et al., 2009).
- Body Parts Satisfaction Scale-Revised (Petrie et al., 2002).
- Body Parts Satisfaction Scale for Men (McFarland & Petrie, 2012).
- Body Image and Eating Behaviour Questionnaire (Low Energy Availability Amongst New Zealand Athletes questionnaire [Slater et al., 2016]).
- Body Shape Questionnaire (Cooper et al., 1987).
- Self-Objectification Questionnaire (Noll & Fredrickson, 1998), revised 10-item version (Fredrickson et al. 1998).
- Appearance Anxiety Scale (Dion et al., 1990).
- Body Consciousness Scale (McKinley & Hyde, 1996).
- Body Image Scale (Secord & Jourard, 1953) and adapted to Turkish (Hovardaoğlu, 1992).
- Multidimensional Body Self-Relations Questionnaire (Cash, 2000).
- Social Physique Anxiety Scale (Hart et al., 1989; Petrie et al., 1996).
- Body Image Avoidance Questionnaire (Rosen et al., 1991).
- Eating Disorder Examination Questionnaire-Version 6 (Fairburn & Beglin, 2008).
- Body Image States Scale (Cash, 2002).
- Male Body Checking Questionnaire (Hildebrandt et al., 2010).
- Muscle-Based Silhouette Measure (Frederick et al., 2005).
- Conformity to Masculine Norms Inventory-46 (Parent & Moradi, 2009).
- Athletic Identity Measurement Scale (Brewer & Cornelius, 2001).
- Exercise Dependence Scale (Hausenblas & Downs, 2002).
- Bodybuilding Dependence Scale (Smith et al., 1998).

Appendix B

Mixed Methods Appraisal Tool, version 2018 (Hong et al., 2018)

Quantitative	Are there clear research questions?	Do the collected data allow to address the research question?	Is the sampling strategy relevant to address the research question?	Is the sample representative of the target population?	Are the measurements appropriate?	Is the risk of non-response bias low?	Is the statistical analysis appropriate to answer the research question?	Overall study quality
Blouin & Goldfield (1995)	Y	Y	U	Y	U	Y	Y	Moderate
Devrim et al. (2018)	Y	Y	Y	Y	Y	Y	Y	High
Edwards et al. (2016)	Y	Y	Y	U	Y	Y	Y	Moderate
Galli et al. (2015)	Y	Y	Y	Y	Y	Y	Y	High
Galli et al. (2017)	Y	Y	Y	Y	Y	Y	Y	High
Gibson et al. (2019)	Y	Y	U	Y	Y	Y	Y	Moderate
Goltz et al. (2013)	Y	Y	Y	Y	U	Y	Y	Moderate
Hale et al. (2010)	Y	Y	Y	Y	Y	Y	Y	High
Hallsworth et al. (2005)	Y	Y	Y	Y	Y	Y	Y	High
Harmancı & Okray (2021)	Y	Y	Y	Y	Y	Y	Y	High
Killion & Culpepper(2017)	Y	Y	U	Y	Y	Y	Y	Moderate

Petrie & Moore (2023)	Y	Y	Y	Y	Y	Y	Y	High
Quantitative	Are there clear research questions?	Do the collected data allow to address the research question?	Is the sampling strategy relevant to address the research question?	Is the sample representative of the target population?	Are the measurements appropriate?	Is the risk of non-response bias low?	Is the statistical analysis appropriate to answer the research question?	Overall study quality
Pickett et al. (2005)	Y	Y	Y	Y	U	Y	Y	Moderate
Satterfield & Stutts (2021)	Y	Y	Y	U	Y	U	Y	Moderate
Stapleton et al. (2016)	Y	Y	Y	U	U	Y	Y	Moderate
Wesołowska (2020)	Y	Y	Y	Y	U	Y	Y	Moderate
Qualitative	Are there clear research questions?	Do the collected data allow to address the research question?	Is the qualitative approach appropriate to answer the research question?	Are the qualitative data collection methods adequate to answer the research question?	Are the findings adequately derived from the data?	Is the interpretation of results sufficiently substantiated by data?	Is there coherence between qualitative data sources, collection, analysis and interpretation?	Overall study quality
Atkinson (2011)	Y	Y	Y	U	Y	Y	Y	Moderate
Galli & Reel (2009)	Y	Y	Y	Y	Y	Y	Y	High
Nelson & Jette (2022)	Y	Y	Y	Y	Y	Y	Y	High

Mixed methods	Are there clear research questions?	Do the collected data allow to address the research question?	Is there an adequate rationale for using a mixed methods design to address the research question?	Are the different components of the study effectively integrated to answer the research question?	Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	Are divergences inconsistencies between quantitative and qualitative results adequately addressed?	Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?	Overall study quality
Cafri et al. (2008)	Y	Y	Y	Y	Y	Y	Y	High
Fasczewski et al. (2022)	Y	Y	Y	Y	Y	Y	Y	High
Pinto et al. (2020)	Y	Y	Y	Y	Y	Y	Y	High
Steinfeldt et al. (2011)	Y	Y	Y	Y	U	Y	Y	Moderate

Note. Y=Yes (1 point). N=No and U=Unclear (0 points). Studies given a quality rating of High if scored 7/7, Moderate if scored 4-6/7 and Low if 0-3/7.

Appendix C

Interview guide

Interview guide areas	Examples of questions and follow-up questions used	Rationale (aided by the continual documentation of memos)
First iteration		
Experience of their physical and/or mental health difficulty	“How would you describe your experience of getting your leg amputated?” “What was your journey like in getting the PTSD diagnosis?”	Due to the research aims exploring physical exercise participation, body image and masculinity, the questions in initial interviews were kept broad to pave the way for emerging themes and then to follow up on these in subsequent iterations.
Experience of physical exercise participation	“What is the function of rugby for you?” “You mentioned that bodybuilding helps you. In what way?”	
Experience of body image	“How do you feel about your body?” “How did the knee injury affect how you feel about your body?”	
Experience of masculinity ideologies in their lives	“What are your experiences of masculine norms?” “What does masculinity mean to you?”	
Second iteration		
Body image before the military and in childhood	“How do you remember feeling about your body as a child?” “Did your body image perception change at all in the military?”	The following interviews further explored the codes and categories developed during the first iteration to create an emerging theory. Questions were around the trajectory of their body image and how exercise ties into
How body image ties into current physical exercise participation	“You said that you like to be recognised as ex-military. What role does physical exercise have in maintaining this appearance for you?”	
Overtraining and the sense of being “stuck” in exercise	“How would you feel if you were unable to exercise?”	

Interview guide areas	Examples of questions and follow-up questions used	Rationale (aided by the continual documentation of memos)
	“You mentioned you still feel you need to run 10k, even if your knee is injured. Can you explain to me further about your reasons for doing this?”	this, and the extent to which exercise was a coping mechanism.
How exercise has been used as a coping mechanism	“How do you think exercise has helped you through the period of time you had adjustment disorder?”	
Third iteration		
History of elevated standards and self-expectations (before, during and after joining the military)	“You mentioned that you were promoted to officer young – do you feel you have always been driven?” “You mentioned your fear of failure – what was this like in childhood?”	The final interviews aimed to develop the emerging theory by exploring further the conditions that the
How they perceived their self-worth to be before, during, and after the military	“What motivated you to join the military?” “What impact did the army have on your self-worth?” “How do you feel about your identity connected to the military?”	categories may operate under. Further understanding was sought regarding elevated standards and
Nuances in the sort of military experience exposed to that may have affected transition experiences and body image difficulties	“What do you think affected this desire to box away what had happened in the military?” “What sort of situations in the military do you think shaped you the most?”	self-worth, and how this tied into the military identity and body image.
How body image changed over time	“You mentioned that you were called names due to your weight in school. What is your relationship with your body like now?”	

Appendix D

Audit trail: Examples of memos, diagrams, and post-interview reflections

9th February 2024 – first post-interview reflection (Adam)

Looking back at the transcript from the first interview with Adam, there are areas where I could have possibly probed more or asked further questions. I can use this as a learning point for future interviews but also accept to some extent that I am still a novice researcher relatively new to the skills of qualitative interviewing. This practice of doing regular post-interview reflections and analysis of the transcripts soon after completion of the interview will hopefully enable me to refine my skills throughout. To some degree, I also noticed that I felt like I was consuming Adam's time, possibly reflective of the shifting of the power dynamics (compared to interviewing clients in NHS settings). I also worry that some of my questions were possibly too broad, for example asking about his knee injury generally. Although this gave rise to important contextual information, I wonder if I could have been braver and probed a bit deeper into how this injury made him feel about himself, and what this meant for him and his identity, for example (*to work on this in future interviews*). I later returned to this memo following going through this initial transcript with my supervisor. To remind myself that it is OK to ask the question 'why', and also be mindful of leading statements (I noticed that I would often make some sort of judgement, for example, 'that must have been hard', possibly due to my clinical psychology training, but the need to separate from this as a researcher).

29th April 2024 - post-interview reflection (Eddie)

I think this interview largely went well and continued to be participant-led, i.e., Eddie shared that "I think that's important to talk about at some point is the role that actually the Jiu Jitsu and kickboxing had". I then followed this with "would you mind sharing more about that?" I found it useful to keep handwritten notes of the points I wanted to return to, to ask further prompts about. It appears that martial arts has many similarities to the military (needing a complete focus on the task at hand) and this was what was important for Eddie, who possibly in the face of experiencing adjustment disorder, was conflicted in his desire to stay connected to the military identity. Perhaps exercise participation enabled continued association with the military (by providing an environment where he is still fighting in a very

controlled manner). Following this interview however, I felt a sense of responsibility and guilt. I wonder if this came from the sense of ‘civilians do not care about the work done by the military’ that had been conveyed by Eddie, and feeling as though his military achievements do not hold importance in the civilian world. I wondered whether I am part of the problem, perpetuating this. I also wondered whether my research, where although it had initial aims rather than hypotheses, was also ‘part of the problem’ – assuming that I know the issues that veterans and serving members are facing, when often the issues will be something else. I tried to manage this by telling myself that ‘research cannot be about everything’, although of course I will try my hardest to represent participants’ voices in the data I do collect.

10th May 2024 – memo when doing theoretical coding from the first iteration of data

During the theoretical coding stage of the first iteration, I came up with the following questions and hypotheses that informed my thinking about the data and subsequent iterations:

- Body image issues earlier in life as possibly influencing the drive to join the military? (talking about being “a late bloomer”, or “was bullied for my height”). Participants interestingly spoke about body image to some extent before I had asked them about it, which feels somewhat reassuring as a researcher to know that I am not imposing an idea on them.
- Did this also affect the way they viewed their masculinity?
- Did participants view joining the army to be the solution (more masculine environment, need to perform a certain way)?
- Could it have been that exercise was used as a form of ‘masculation’/being masculine in the army? Although people could opt out, this would be viewed as emasculation and they would be treated differently (the expectation to push past the point of physical exhaustion in the army otherwise they will be labelled as lazy by superiors)
- There appeared to be both internal and external pressures to maintain this image in the army – “short but made up for it as I was strong”, I wonder how much of these pressures existed before they joined that predisposed people to internalising such pressure?

- How much of this could be attributed to the internal drive as a person to succeed, to never complain about injuries or illnesses? Personality traits or traits associated with men in general (thinking about the results of the earlier systematic review)?
- Possibly the realisation later that the army nor exercise solved these things, and the need to find them in other ways – or maybe exercise is used as a replacement for what the military was assumed to give them?
- What is the function of exercise now in maintaining body image? Are people feeling ‘stuck’ in exercise, even though they might refer to it as a helpful coping mechanism? What are the underlying motivations? This is because many alluded to the need to still push through injury when training. In the army they did not have a choice, but they now do have a choice – why is this?
- Similarly to the exercise element of the military, in that they have to meet certain requirements when joining – is continuing to exercise now (despite injury, pain, etc.) a way of maintaining their masculinity?
- Some participants conveyed a sense of not being, or feeling, good enough – did the army make them feel this way? How do they feel about themselves generally? Is exercise a way to combat this, to make them feel good enough? If they are good enough by the army’s standards, are they good enough for civilian standards?
- Military identity and culture are two very different things (someone could have a strong identity as a soldier, however also struggle with some of the culture of the military, for example, regressive attitudes towards mental health).
- I would like to ask more historical questions about experiences prior to joining the army (longitudinal factors).

1st June 2024 – memo when theoretical coding and thinking about interview guide for second iteration

Start by exploring exercise and the purpose of it for them, their motivations, etc. The timeline of this since leaving the army - Was there a gap between leaving the army and taking up exercise again? What keeps the exercise going? After discussing how exercise helps them, could explore whether exercise hinders them in any way? Is the military mentality of ‘having to push themselves’ still being used now? What were their motivations for joining the army? If body image is raised here, could explore this further (below).

How did you feel about your body/how you looked before the military/when you were

younger? Explore if any bullying was present? Did this change when in the military? How? How would you describe your relationship with your body in the military?

Unsure about how much to explore of their injury/illness. Was not the focus in many interviews. Could ask them about this when it comes up for them – if not brought up, to ask them towards the end – how does the injury/illness fit into all this?

Showing distress/masculinity ideals – How do you feel about showing emotion? How was this experienced in the military? By yourself, peers, chain in command? Explore any generational differences? What effect does this have on you now?

Overarching themes found from first iteration:

- Difficulties with body image in childhood – could influence decision to join the military, most (4/5) joined young and referenced some bullying when younger (late bloomer, looked small, last to be picked in PE, etc.)
- The “green kit” as protection and safety
- Generational attitudes towards masculinity and stoicism – chain in command
- Compulsion to exercise, sometimes pushing past the point of physical exhaustion

13th August 2024 – segment from a post-interview reflection (George)

I noticed towards the end of the interview when I was exploring ideas about masculinity and the pressures George might have experienced as a man that he seemed to take care of his words, maybe not wanting to upset me as the female researcher – when discussing different expectations depending on gender. I wonder if there is an alternative way I can frame this, so I am not making participants feel awkward or the need to provide socially desirable answers.

I returned to this memo in February 2025 and in hindsight, I think I should have named the gender difference in the room at the beginning – this may have made participants feel more at ease of talking about their masculinity or difference in gendered expectations.

22nd August 2024 – a common reflection made after interviews

I am worrying that I am making interpretations of the data that are too far removed from what the participants are telling me. Most of my anxieties seem to revolve around the knowledge that the participants will receive a copy of the thesis, as well as however the research ends up being disseminated. My fear is that participants will tell me that they are

unhappy with how their views are represented. I am also concerned that my participants are too heterogeneous characteristics-wise, and it will be difficult to form conclusions from such a varied sample with different experiences. Decided to bring this worry to colleagues (below) and my supervisor.

30th August 2024 – reflection after discussion with peers at the Grounded Theory Institute

Having just discussed and had helpful insights from peers at the Grounded Theory Institute about the reflection above (22nd August), it was suggested that I ask myself ‘why do I think I am imposing myself on the data?’ I think this stems from my own research interests – I initially wanted to do the literature review on body image in military veterans, or serving military members. However, there was just not enough research, or research too heterogeneous, to feel like I could do it justice. This made me therefore want to focus on body image in the empirical study. However, by making this my focus of the thesis (the previous advertisement was entitled ‘body modification’), it was not attractive enough to the intended sample, so I had to change the focus of the research (how it was initially advertised and then how the first iteration interview guide was structured) to physical exercise, but still ask about body image within this, and make links. However, I wonder that by creating a category concerned with body image that I am “forcing” it? However, looking at the initial interviews I did that yielded this concept, four in the first iteration, I noticed that participants mentioned things to do with their body (ie. height, shape, size) before I even explicitly asked about body image. I worry that my interpretations are too far removed, however, and that my positioning as someone who is unlike my sample in many ways (female, civilian, etc.) exacerbates this concern. I reminded myself that GT is about making these interpretations, in that it is not meant to be a like-for-like copy of the primary data. Building a theory comes with making interpretations – and by going back to the data I can return to this concept and see if I can build on it. The need to maintain reflexivity throughout and I will also document these in the Discussion section for transparency.

31st August 2024 – memo reflecting on recruitment and the sample

I reflected on the heterogeneity of the sample characteristics and my own anxiety around (what I presumed as) the difficulty creating a theory reflective of all the participants when they are all so different. I kept inclusion criteria broad to likely appease my own

anxiety around recruiting enough participants, given there were periods currently where I am struggling to recruit. I reflected on this with my supervisor recently too where I had voiced trepidation with the heterogeneity of the sample. Despite heterogeneity, all participants in the sample fit the inclusion criteria, so having variations in experiences and personalities can just add further to the theory by making it applicable across these groups – and to remember that the theory is not ‘summing up’ all participants’ experiences; rather, can account for differing conditions that participants may or may not meet.

1st September 2024 – memo reflecting on the use of medicalised language

I was conscious of the fact that the last two participants (Ian and Harvey) ticked ‘no physical or mental health difficulties’ in the questionnaire. I reflected on what Harvey had communicated in the interview, referring to himself as stoic, with mental health-focused language not particularly relevant to him or ever has ever considered thinking about this. However, he also spoke about failure, feeling that he should have done more to prevent his injury, difficult body image back in school (was always overweight), etc.; overall, elements that other people might refer to as struggling with their mental health. I wonder what value the term ‘mental health difficulties’ has in this context, and that although this is common terminology, may be better phrased in this population. I think my use of the term ‘mental health’ will largely operate on a case-by-case basis and I will evaluate whether it feels appropriate to name directly in interviews, or whether it might be more appropriate to phrase it differently. However, at the same time, I wonder if by doing this, I am colluding with the tendency of veterans to shy away from talking about mental health due to the stigma. Does my reluctance to name it for fear of ‘intruding’ or introducing something almost alien reinforce the stigma, i.e., confirming that there is something to be afraid of?

3rd September 2024 – memo when doing theoretical coding from the first two iterations of data

When thinking about how body image was represented by the participants, many shared that the army do not seem to care if you were any particular shape or size, it was more about what you could do. There was maybe some lighthearted jest from peers, but it was seemingly not a consequence of institutional socialisation. Considering that most participants raised issues relating to body image, whether it was being overweight as a child (George, Harvey) or a “late bloomer” (Eddie) or generally bullied because of their size (Brian, George)

– I wonder if being in the army, which although had a focus on physical exercise/prowess (and therefore connotes being in good physical shape/composition) was actually a mediator of these body image issues; because of the high amount of physical exercise, participants’ fitness was increased, incidentally yet markedly affecting their appearance. I wondered what participants made of this, such as any ongoing pressure to upkeep this afterwards. I wondered if this connected to the fact that many participants spoke about needing to maintain these standards of fitness? Many shared the tendency to hold themselves to high standards, which were also through a multitude of reasons like wanting to uphold the ‘military look’, for example still being able to do the military minimum speed, etc. This appeared reflected in the tendency for participants to share a high degree of association with the military even once leaving. Did departing from these physical fitness standards (both in terms of how they look and what they can do) signal departing from their military identity? The ongoing use of physical exercise after the military thus appears to be driven by different pressures: the desire to maintain the military image, maintaining strength, or as a side effect of continued exercise involvement (as a transitional coping strategy).

15th September 2024 – segment from a post-interview reflection

Throughout all interviews, I keep noticing myself blurring the lines between being a qualitative researcher and being a trainee clinical psychologist. I am finding managing multiple identities difficult, however I also wonder if some of my tendencies to engage in some perhaps therapeutic responses stem from the want to support them in some way, considering many of them were not having concurrent therapy or had never experienced this. Also possibly to align myself more closely with them considering how different I am to them/aware of my positioning – in the hope of increasing rapport and facilitating further conversations. Although I do accept that this is probably normal to some extent, and facilitated further conversation, helped participants be more open with me, and so not necessarily an inherently “bad thing”, I wondered what other qualitative researchers would be like and how their approach might differ. Also, did I prioritise therapeutic responses at the expense of perhaps making more links in what they were saying and responding as a researcher? I wonder therefore to what extent this has affected the yielded data – possibly not much, and it may be that prioritising therapeutic rapport also enabled them to feel more comfortable to share more with me – however, it is still a concern of mine, that I was not a ‘by the book’ qualitative researcher.

16th September – post-interview reflection (Jack)

I felt at points that it was difficult to know when to “push” for more information. When I asked about motivations for joining, he appeared reticent to tell me and I had to assure him that everything in the write-up would be anonymised and confidential. He then admitted he had a drug addiction and so the military was an escape for him. I asked a few more questions around this (i.e. if he received support, if the decision to join the army was his or anyone else’s) and although he did respond, he didn’t really expand on his answers. I worried that my asking him to take part in the research and explaining the general aims of the research had been misleading if I was then asking him further about his drug addiction. I think I decided to assure him he didn’t have to tell me anything he did not wish to, but at the same time if he did wish to, everything would be confidential and nothing could get traced back to the army or anywhere else – and we moved on. When I asked him at the end of the interview if he felt okay bearing in mind we had spoken about some difficult things, he said that he was fine, but appeared surprised that I was asking. I said I would send through the signposting sheet, but I worried afterwards whether my questioning would ‘make’ him not OK. I had to remind myself that although we have to protect participants from harm and ensure their wellbeing, this is not clinical practice and these are not high-risk patients I am working with.

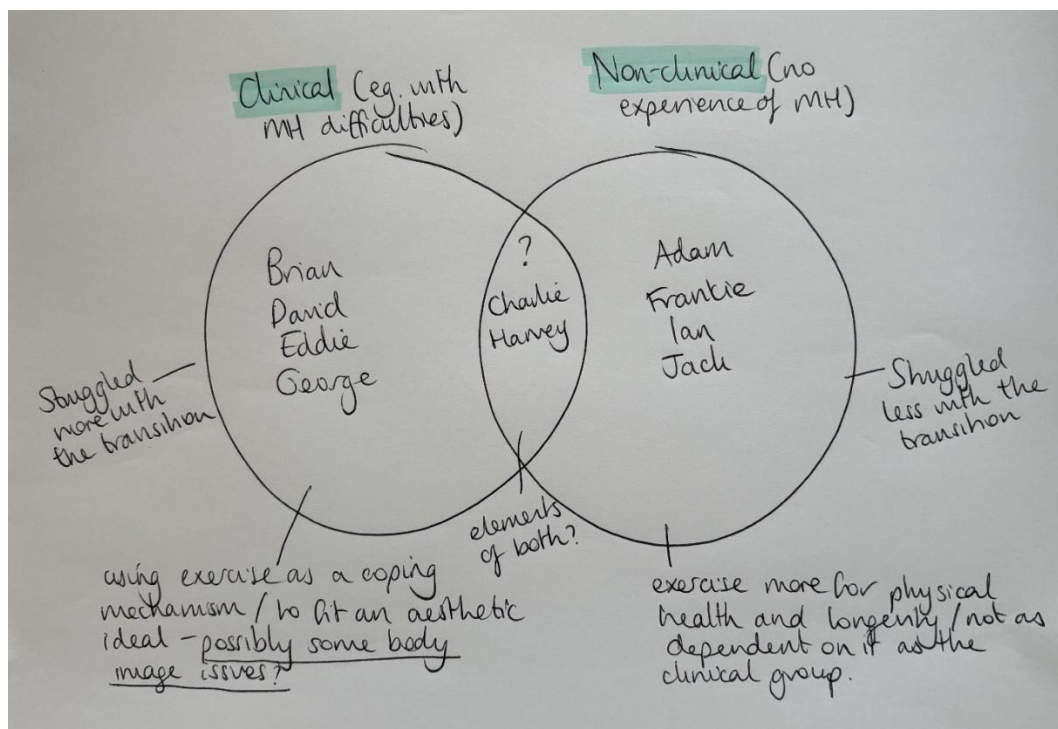
20th September 2024 – memo when doing theoretical coding from the first two iterations of data

At this stage, it appears as though I have two sorts of participants who disclosed different things to me (some participants reported using exercise as a coping mechanism [those who had experience of mental health difficulties] and those who did not view exercise in this way [no experience of mental health difficulties]). As such, I wonder whether I could classify participants into two types: clinical and non-clinical (Figure D1). However, I also worried about who defines this (and what these definitions explicitly mean), given that I had not asked any of the participants if they had been formally diagnosed with a mental health condition, although many participants volunteered this information, e.g. generalised anxiety disorder (David) and borderline personality disorder (George). I was mindful that I was deciding who is clinical and who is not, based on the impression I got during data collection and analysis (that then determined who went into which quadrant in the Venn diagram). I am

therefore thinking about coming away from this idea of ‘categorising’ participants in such a way as it is probably reductionist and risks omitting the individual nuances if I am ‘putting them into boxes’ at this stage. Conversations with my supervisor at a later stage enabled me to think about the differences between participants in the sense of them either meeting a condition of the theory, or not meeting the condition (i.e. participants who had met the sufficient condition of bullying in childhood and the necessary condition of military experience would then go on to experience body image difficulties in civilian life).

Figure D1

An initial Venn diagram composed during the initial stages of the analysis when making sense of the data and the variation in the sample characteristics



22nd September 2024 – memo thinking about the second round of interviews and how to develop the theory

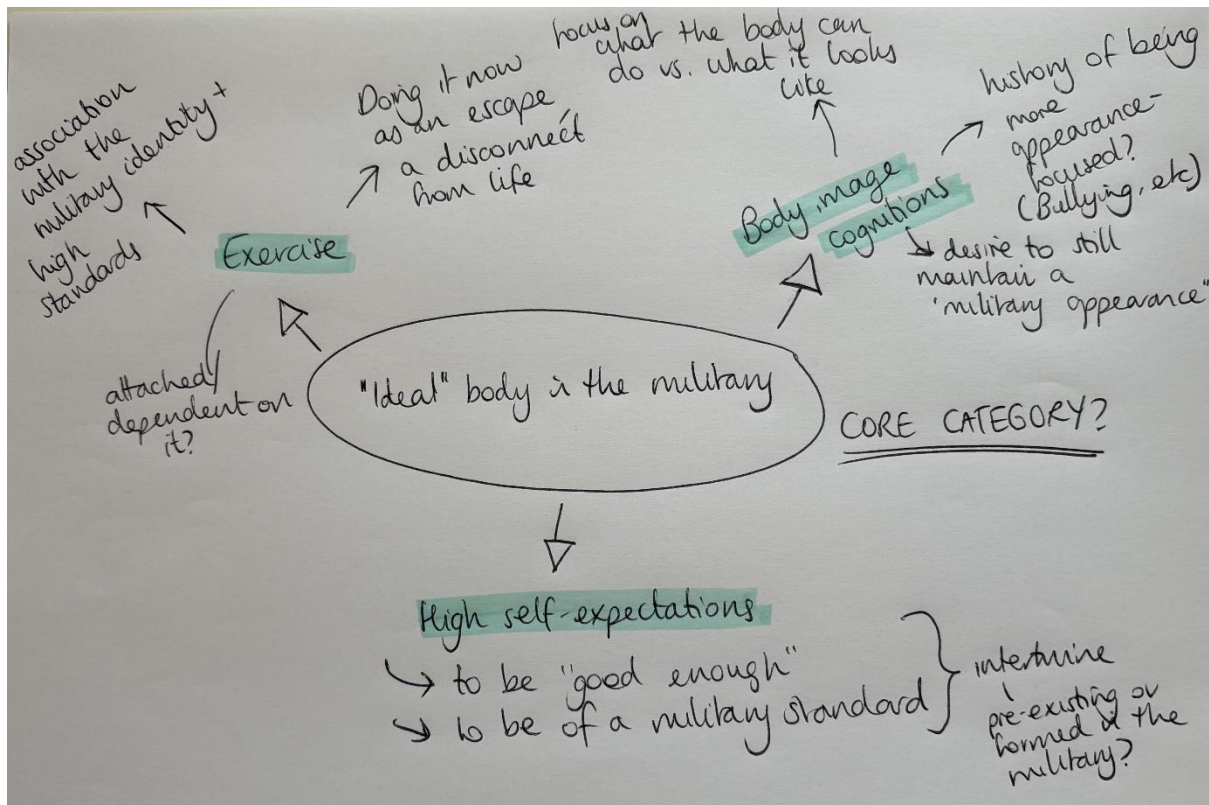
I am noticing that many participants shared having very high self-expectations and the tendency to view themselves as a “failure”, e.g. Harvey whose knee became injured during his special forces training which led to leaving the army. I wonder if the military shaped this, due to the strict standards and the stoic nature of military culture, and the pressure to do what they are told all the time, or whether this was present beforehand? How much of this stoicism

was present beforehand, and how much predisposed them to want to join the military? Did this influence how much they were willing to share with me in the interview as well? *I am going to therefore explore this further in the third iteration.* Some participants also disclosed struggling with their weight in childhood (George and Harvey) – George said he was bullied for it. It was unclear how much he was affected by this, as he seemed to laugh it off in the interview. Again, I wondered if this relates back to the stoic nature of veterans (or men generally). I am also unsure if the military was more attractive to them because of these early body image concerns. George said he only went to an open day because his dad forced him to, and Harvey said that he was always more interested in the outdoors and always knew he would have a career in this or something like the police. The military may have been an inadvertent way to mediate these body image concerns, but participants also shared that in the military, it was about how fit they were and what they could do as opposed to what they looked like; overall, improved physical appearance as a byproduct of this. *I am going to also explore further motivations for joining the military in the third iteration (how much of this might be due to seeking out a physically exertive role, or where their body would be addressed ‘for’ them, or was it due to pre-existing military-like personality traits?)*

I am wondering if the core category could be “*the ideal body in the military*”. However, I worry as well that this would not be representative enough and would possibly be what I want to find in the data rather than what actually exists. Whilst I do have some data that centres around this, it feels too reductionist and ignores other factors at play. I am also wary of blurring the category of ‘high self-expectations’; what level lies within the military expectations and how much is within personal expectations, and how much do they intertwine? Figure D2 shows an initial draft of some of my ideas at this stage – *to develop further with the next round of interviews.*

Figure D2

Initial diagramming of ideas gleaned from the first two iterations of data



24th September 2024 – memo documenting thoughts and developing categories

From the first two rounds of interviews, there appear to be three main categories. A commonality between the interviews is that body image is discussed at three timepoints (before joining the military, during, and afterwards in the civilian world). Exercise also seems to be something used by participants for different reasons (for some, used as a coping mechanism in a contrasting civilian world or struggling with their mental health, and for others, just used as a matter of routine and physical health). I therefore thought the category would be more aptly named 'attached to exercise', as opposed to being 'stuck in exercise', as the latter indicates that there is some lack of control present. The former is more about the participants choosing to still exercise, for all the different reasons it gives them. For example, the key role of companionship in exercise; Harvey shared that it felt really important to have exercise in a group setting, linking to military values of not wanting to let the team down, and having others that rely on them, etc. *The third category that I would like to explore further in the next round of interviews is high self-expectations, where some participants shared*

feelings of perfectionism, aversion to failure, and high standards. I would like to see how this fits in with the other two categories (body image and exercise). Figure D3 shows an initial draft of the results section, where I organised the codes into three categories.

Table D1

Table formed from the initial analysis from the first 10 interviews

Category	Subcategory
The military as a mediator of body image	Body awareness pre-military
	Body changes and comparisons in the military
	Body pressure post-military
Attached to exercise	Exercise as a coping mechanism
	Exercise maintaining military identity
High self-expectations	The self-expectation to be of a military standard
	The self-expectation to be “good enough”

5th October 2024 – memo when reflecting on my initial analyses and desire to form a ‘core category’

I wonder if my initial results section reflected the desire to form what Glaser advocated as the central component of GT: a core category. I therefore tried to organise my data around this point in order to form a valid and robust theory. The earlier 3 categories therefore comprised my initial thought: *“earlier body awareness can influence later preoccupation with body image in men with military experience, somewhat managed or controlled by exercise, also affected by high self-expectations”*. Although this was reflective to some degree of what participants had shared with me, I noted it appeared possibly overly simplistic and therefore decided to keep this tentative when analysing the final iteration.

2nd November 2024 – memo at the focused coding stage during the final iteration of interviews

When reflecting on the role of continued exercise participation, I wondered if participants are turning to physical exercise because they are unsure of what else to do, and that maintaining physicality to some degree gives them some level of control in an otherwise contrasting civilian world. This may be heightened in participants who joined the army when

transitioning to adulthood, if the army is all they have known. Exercise may provide some form of purpose, along with it being something so central and key to their military experience that it remains with them as something keeping the military identity intact. However, this does not appear to be the case for all people; some participants appeared less attached to their military identity and did physical exercise more for reasons that I initially thought were unrelated but actually do still have many similarities to the military, i.e., being routine-led and goal-driven. It appears to be that for the participants who disclosed some form of difficult earlier experience, the military identity was more engrained and the ongoing desire to live their lives with associations to such an identity. I wondered if what borders the emerging theory I am constructing, around all the overarching and sub-categories, is ‘introspection and realisations’, as some participants shared that they have had the opportunity for professional support, in the form of therapy, or for some, having time and distance from their military service has been equally helpful in helping them self-reflect.

17th November 2024 – memo when doing initial and focused coding on the final interviews

I am finding it difficult to know where to code certain chunks of text as “personal identity” or “military identity”. Two intertwine and it is likely they are not discrete, however for the purpose of building a theory, I need to do more thinking about this. Is it possible that for some people, their personal identity and military identity are very intertwined, and perhaps for others, less so? What causes this? Is it potentially ‘always knowing they wanted to be in the military’ so attaching military identity to their self-worth? The higher they got up in the military (officer level for some people) the more attached to the military identity they are?

5th December 2024 – memo when doing theoretical coding towards the end of the interviews

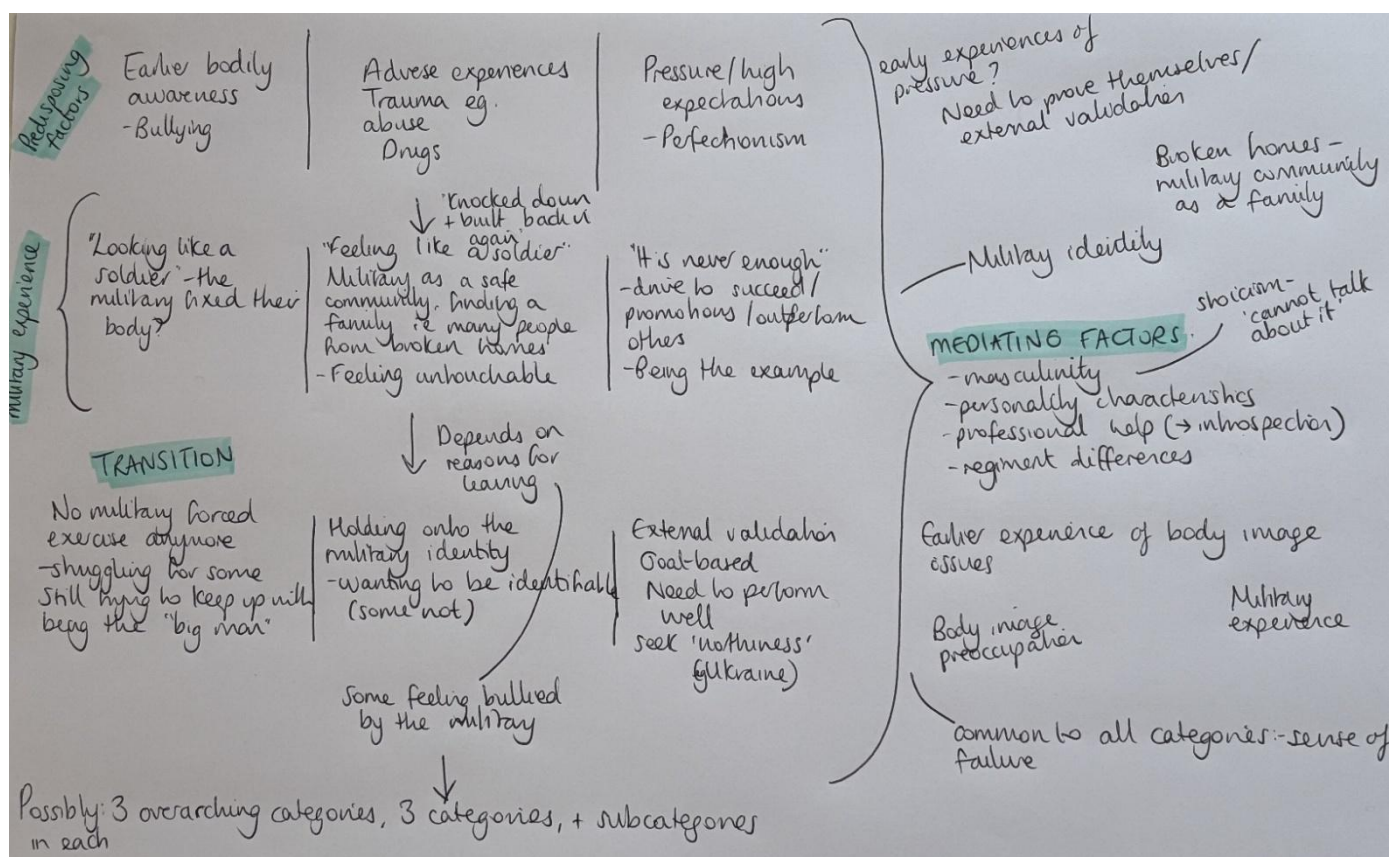
Now that I am coming to the end of the interviews, I am completing the analysis and trying to build a finalised theoretical model. I am struggling to fit the data I have now into the categories I formed above (largely, which data goes into the ‘body image’ category and which goes into the ‘exercise’ category). For this reason, I am working my way through reorganisation of the categories into a manner that makes more sense. I also wonder if I was forcing a core category on the data when it was unnecessary, especially considering that in

constructivist GT, a core category is not deemed essential. Exercise appears to be something occurring throughout life for the participants (in childhood, during the military, and during the transition stage). Therefore, although having it as one of the main categories makes sense, it also seemed like it should be filtered through all the categories, as it influences all of them.

Whilst I am noticing a general theme throughout (or in most cases) where participants have very high standards, it does not seem to manifest itself clinically unless some degree of trauma was present before the military (Brian, Kevin), or other difficulties (perfectionism and high expectations in the family). Or purely just always wanting to join the military and therefore having more of a military identity? Creating a sense of attachment to the military and influencing association with the military identity after leaving? Could some of this have been protected against by the sense of stoicism expected in the military? I felt I needed to represent this visually to be better able to understand it as a process, as shown by Figure D3.

Figure D3

Notes written handwritten and represented pictorially to help my understanding



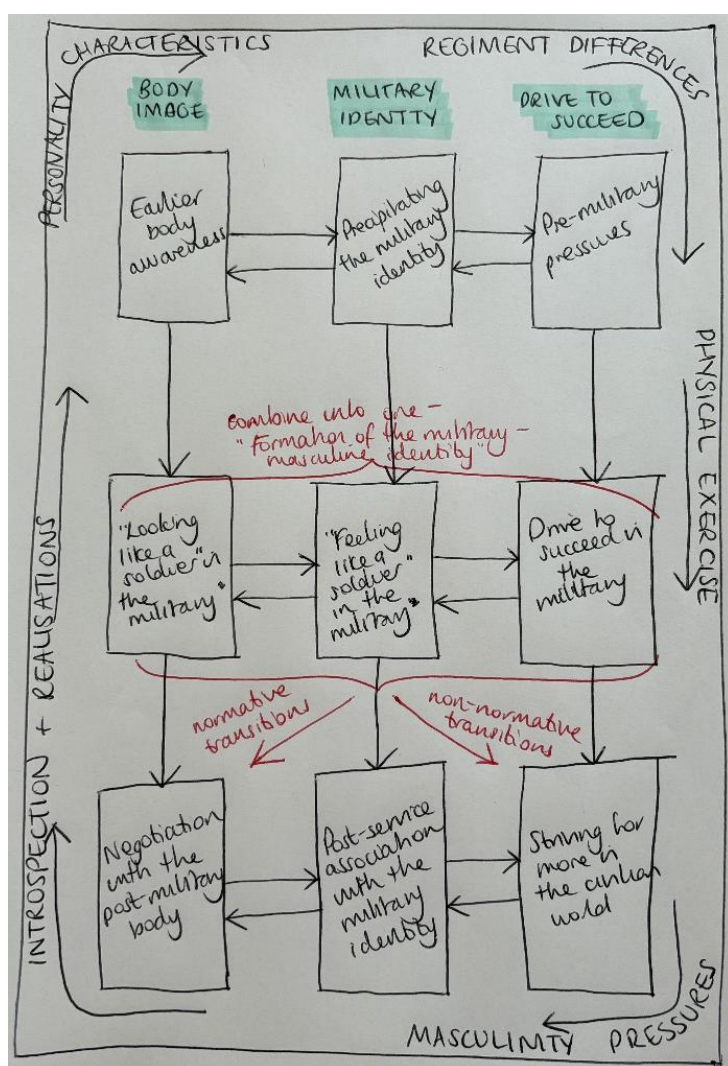
There appears to be a sense of masculinity being needed in the armed forces, however an ongoing tug of war with the need to be more mental health aware, and attempts to reverse stigma (possibly more by the younger generation). Without this awareness, people are more likely to get injured (ie the need to 'push on' despite injury).

2nd January 2025 – theoretical coding following collection of all data

From initial drafting of ideas (Figure D3), I formed a diagram representing the three overarching categories, representative of sequential points on a timeline (Figure D4).

Figure D4

Diagram representing the three overarching categories

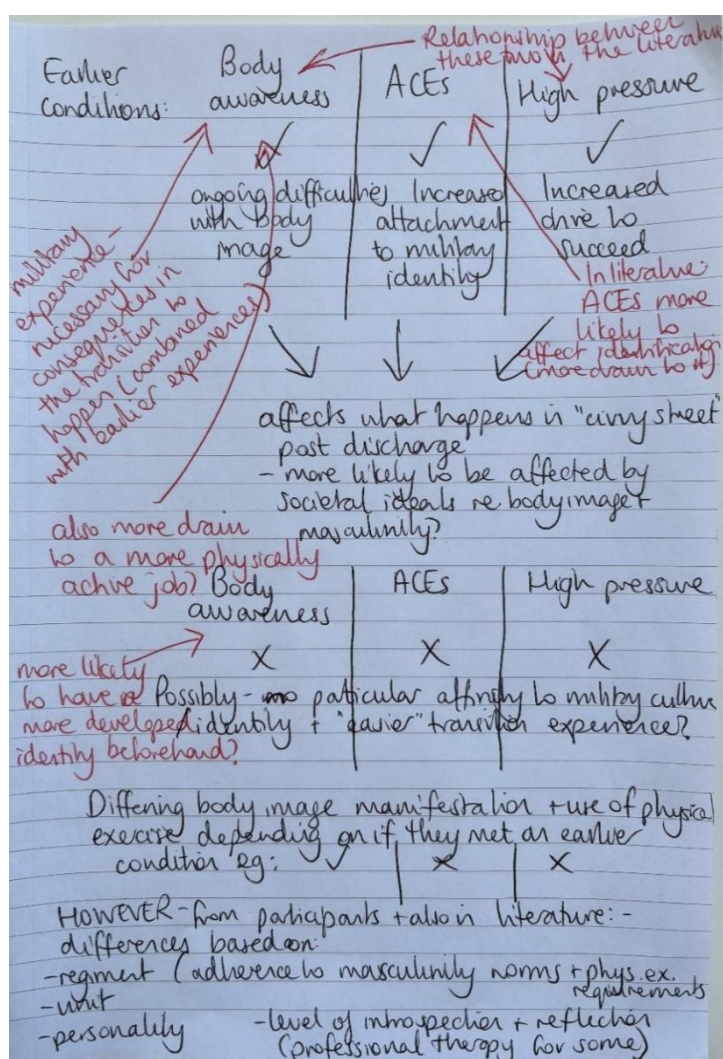


Note. The red arrows are indicative of further amendment following discussion with my supervisor (memo below).

When theoretical coding, I also returned to the literature to see if I could make links between existing research and the categories I am coming up with. In doing so, I found connections between earlier experiences, military experiences, and transition experiences that I wonder would comprise the conditions that are needed in order to make a grounded theory. I represented this visually on paper to aid development of this theory (Figure D5).

Figure D5

Notes made during theoretical coding that comprised the earlier conditions of the theory



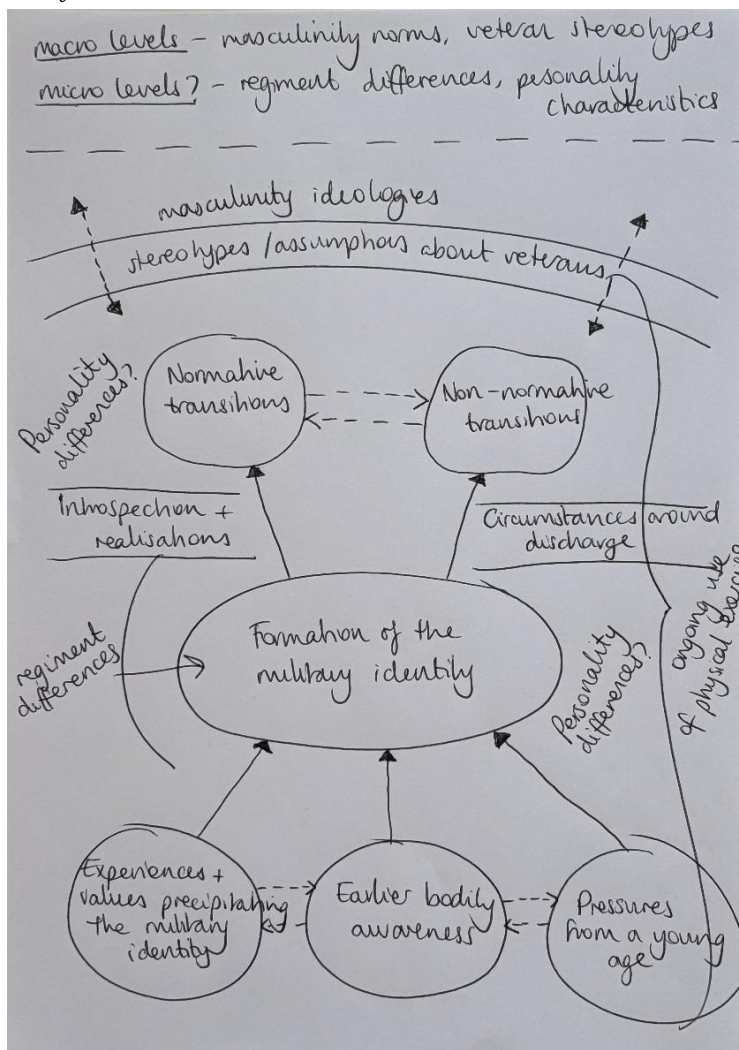
20th January 2025 – memo following discussion with supervisor regarding review of the results

Rather than having a 3x3 diagram (Figure D4), it appeared as though they come together in the middle (to form the one military masculine identity) and break up again when out, to indicate differing transition experiences in the civilian world (some are presented with

an identity crisis). When in the civilian world, veterans will need to re-evaluate the importance of their body (i.e., not as important as it once was, health versus performance). Whilst you stop being in the military, you do not stop being a man, which can become difficult to manage as people get older. Bringing in frameworks of body image and masculinity necessary as they are processes that change, rather than being static concepts. The diagram above was therefore altered, as indicated by the red arrows. I then used inspiration from Lempert's use of diagramming (2007) for the final diagram (Figure D6) in the results section (converted digitally from my handwritten diagram to Canva).

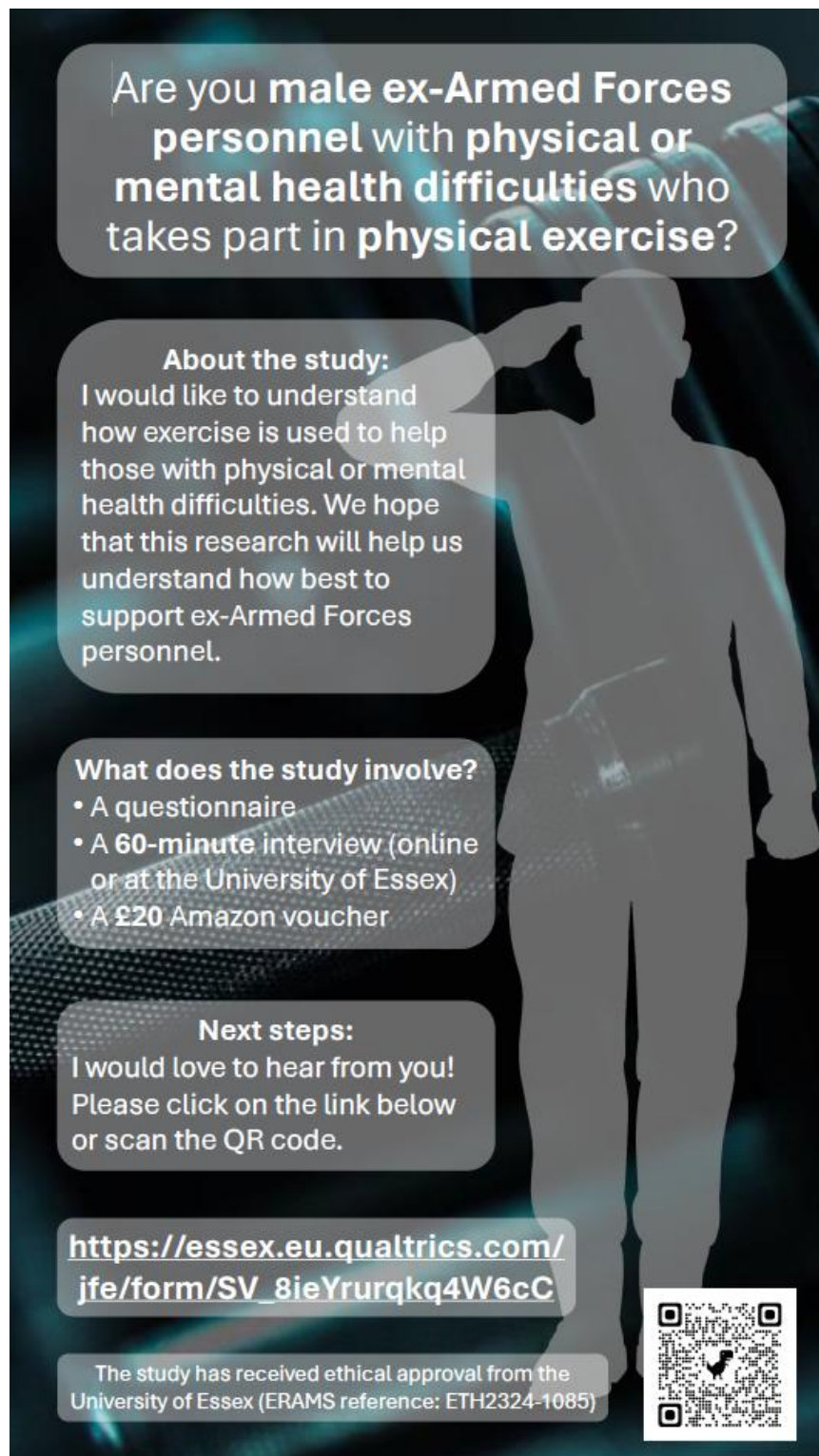
Figure D6

The final diagram representing the grounded theory, prior to digitalisation using 'Canva' software and insertion into the Results section



Appendix E

Study advertisement



The advertisement features a dark background with a silhouette of a person in military uniform on the right. The text is organized into several rounded rectangular boxes on the left side.

Are you male ex-Armed Forces personnel with physical or mental health difficulties who takes part in physical exercise?

About the study:
I would like to understand how exercise is used to help those with physical or mental health difficulties. We hope that this research will help us understand how best to support ex-Armed Forces personnel.


What does the study involve?

- A questionnaire
- A **60-minute** interview (online or at the University of Essex)
- A **£20** Amazon voucher

Next steps:
I would love to hear from you!
Please click on the link below or scan the QR code.

https://essex.eu.qualtrics.com/jfe/form/SV_8ieYrurkq4W6cC

The study has received ethical approval from the University of Essex (ERAMS reference: ETH2324-1085)



Appendix F

Condensed Participant Information Sheet and consent form



Thank you very much for the interest in this study.

Below is further information about the study and whether you would be eligible to take part.

After reading the below, if you still wish to take part, please continue with the questionnaire. I will then contact you shortly to let you know if you would be eligible for further interview.

If you do not wish to take part, that is no problem. You can close down this questionnaire and you will not be contacted further.

What does the study involve?

- My name is Laura and I am researching the experiences of male ex-Armed Forces personnel as part of my Doctorate in Clinical Psychology thesis.
- I would like to understand the relationship between physical exercise and physical and/or mental health difficulties in male ex-Armed Forces personnel.
- This will involve completing a questionnaire and a 1-1 interview (either online via Microsoft Teams, or in-person).
- The questionnaire collects demographic and experiences-related information, such as your year of birth, ethnicity, and when you served in the Armed Forces.
- The interview will be a conversation exploring physical exercise and your physical and/or mental health difficulties.

Do I have to take part?

- Taking part in this study is completely up to you. You can withdraw from the study at any point, without penalty.

What are the benefits of taking part?

- We hope that it will help our understanding of the experiences of ex-Armed Forces personnel.
- In turn, we hope that it will help us understand how to support ex-Armed Forces personnel.

What are the disadvantages of taking part?

- It can be difficult to talk about past life experiences. You will be offered space during the interview to leave or postpone the interview. You do not have to answer any questions you do not wish to answer.

Are there any exclusion criteria?

- If you are under the care of a secondary mental health service, we regret to inform you that you may not be able to take part. This is because the interview might touch upon sensitive topics and feel vulnerable or exposing.
- If you are unsure of whether you can take part, please contact Laura (lw22769@essex.ac.uk).

Confidentiality

- The interview will be audio-recorded to provide a transcript, but recordings will be immediately deleted. I will remove any identifying information, such as your name. You will be completely anonymous in the study.
- Transcripts will be stored on the safe and secure university cloud called Box.
- If you disclose information that suggests that either you or someone else is at harm, I have a duty of care to report this.

- Myself and my supervisor Dr John Day will have access to the transcripts for 10 years after the study has finished.
- Research data is also kept available for future use. If you do not wish your anonymised transcript to be kept in the data repository at the university, please let me know.

Consent

- We will collect written consent prior to the interview. This allows us to process the data. The data controller is the University of Essex, and the contact is the University Information Assurance Manager (dpo@essex.ac.uk).

Concerns and complaints

- If you have any concerns or complaints, please contact the lead researcher, Laura Waddams (lw22769@essex.ac.uk).
- Alternatively, please contact the supervisor, Dr John Day (john.day@essex.ac.uk).
- You can also contact the Director of Research, Dr Camille Cronin (camille.cronin@essex.ac.uk).
- If you are still not satisfied, please contact the University's Research Integrity Manager, Dr Mantalena Sotiriadou (ms1994@essex.ac.uk).

Reviewing

- The study has been reviewed by the University of Essex Sub Committee 2.

Funding

- The research is funded by the University of Essex.

Lead researcher: Laura Waddams (lw22769@essex.ac.uk)

Primary supervisor: Dr John Day (john.day@essex.ac.uk)

Research team: University of Essex, Department of Health and Social Care



1. I confirm that I have read and understand the Information Sheet dated 10th April 2024 for the above study. I have had an opportunity to consider the information, ask questions and have had these questions answered satisfactorily.

Yes

No

2. I understand that my participation is voluntary and that I am free to withdraw from the project at any time without giving any reason and without penalty. I understand that any data collected up to the point of my withdrawal will also be destroyed.

Yes

No

3. I understand that, due to the nature of the subject of the research, that there may be some questions which might be difficult for me to answer. I understand that I have full autonomy during the interviews and can decline to answer any questions. Again, as above, I can withdraw from the interview if I would prefer.

Yes

No

4. I understand that the identifiable data provided will be securely stored and accessible only to the members of the research team directly involved in the project, and that confidentiality will be maintained.

Yes

No

5. I understand that my fully anonymised data will be used for writing up of my thesis and any subsequent research publications.

Yes

No

6. I understand that the data collected about me will be used to support other research in the future, and may be shared anonymously with other researchers.

Yes

No

7. I give permission for the researcher to take an audio recording of the interview. This will be stored on secure, password-protected servers and deleted immediately following timely transcription of the data. These transcripts will be fully anonymised with all identifiable data removed. These will be deposited in the University of Essex data repository, so that they will be available for future research and learning activities by other individuals.

Yes

No

8. I agree to take part in the above study.

Yes

No

Appendix G

Template email to participants

Suggested email subject: Research study – physical exercise in ex-Armed Forces personnel

Hi [participant name],

Thank you very much for your interest in my research and for filling out the survey.

I'd love to talk to you further about your experiences if this is something you would be OK with? It will be an interview for about an hour, held over Microsoft Teams, or in-person at the University of Essex – totally your preference.

If so, what sort of availability do you have? I am flexible with days and times, and can also do evenings or weekends, if these would be better.

I've attached the longer form of the Participant Information Sheet, just for your information (you will have already read the shorter form of this in the questionnaire).

Looking forward to hearing from you, and thanks again,

Best wishes,

[researcher name]

Appendix H

Questionnaire

3/25/24, 4:02 PM

Qualtrics Survey Software

What is your email address? This will be used for Laura to contact you if you are eligible to take part in the interview.

What is your sex?

- ☐ Male
☐ Transgender male
☐ Other (please state below)

In which year were you born?

Which of the following best describes your ethnicity?

- ☐ White English/Welsh/Scottish/Northern Irish/British
☐ White Irish
☐ White Gypsy or Irish Traveller
☐ Any other White background, please describe below:
☐ White and Black Caribbean
☐ White and Black African
☐ White and Asian
☐ Any other Mixed/Multiple ethnic background, please describe below:

☐ Indian
☐ Pakistani
☐ Bangladeshi
☐ Chinese
☐ Any other Asian background, please describe below:
☐ Any other Black/African/Caribbean background, please describe below:

☐ Arab
☐ Any other ethnic group, please describe below:

3/25/24, 4:02 PM

Qualtrics Survey Software

☐ Prefer not to say

What is your religion?

- ☐ No religion
- ☐ Christian
- ☐ Buddhist
- ☐ Hindu
- ☐ Jewish
- ☐ Muslim
- ☐ Sikh
- ☐ Prefer not to say
- ☐ Other:

Which of the following best describes your sexual orientation?

- ☐ Heterosexual or straight
- ☐ Gay
- ☐ Bisexual
- ☐ Prefer not to say
- ☐ Other:

What is the first half of your postcode?

What is your marital status?

- ☐ Single, never married
- ☐ Married or registered same-sex partnership
- ☐ Separated
- ☐ Divorced or dissolved same-sex civil partnership
- ☐ Widowed or surviving same-sex civil partner
- ☐ Prefer not to say
- ☐ Other:

3/25/24, 4:02 PM

Qualtrics Survey Software

What is your highest level of education?

- ☐ No formal qualifications
- ☐ Secondary school (GCSEs)
- ☐ Apprenticeship
- ☐ Further education, e.g. A Levels, NVQ, BTEC
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ PhD or higher
- ☐ Prefer not to say
- ☐ Other vocational or work-related qualifications
- ☐ Other:

What is your employment status?

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Self-employed
- ☐ Unemployed (looking for work)
- ☐ Unemployed (not looking for work)
- ☐ Retired
- ☐ Student
- ☐ Disabled, not able to work
- ☐ Prefer not to say
- ☐ Other:

What is your annual household income?

- ☐ Below £10,000
- ☐ £10,001 to £20,000
- ☐ £20,001 to £30,000
- ☐ £30,001 to £40,000
- ☐ £40,001 to £50,000
- ☐ Above £50,001

3/25/24, 4:02 PM

Qualtrics Survey Software

☐ Prefer not to say

How long did you serve in the military?

Which year did you leave the military?

Which branch of the military did you serve in?

What was your rank?

How often do you take part in physical exercise?

☐ 1-2 times a week☐ 3-4 times a week☐ 5-6 times a week☐ 7 days of the week☐

Please provide further information about the type of physical exercise that you do.

Did you do physical exercise before, during, and/or after military service? Please tick all that apply.

☐ Before☐ During

3/25/24, 4:02 PM

Qualtrics Survey Software

☐ After

Do you consider yourself to have physical health difficulties, and/or mental health difficulties? Please tick all that apply.

- ☐ Physical health difficulties
- ☐ Mental health difficulties
- ☐ Both physical and mental health difficulties
- ☐ Neither of these



If you are happy to share, please provide some information about the nature of your physical and/or mental health difficulties.

Powered by Qualtrics

Appendix I

Examples of categories generated during focused coding stages

<input type="checkbox"/>	<input type="radio"/> Body image	1	1
	<input type="radio"/> Aesthetically driven from a young age	1	5
	<input type="radio"/> Body does not have to look a certain way	2	4
	<input type="radio"/> Body image at its worst	2	6
<input type="checkbox"/>	<input type="radio"/> Injury description	15	37
	<input type="radio"/> Accepting the injury or illness	1	4
	<input type="radio"/> Adapting to the injury	1	5
	<input type="radio"/> Effect of injury now	8	13
<input type="checkbox"/>	<input type="radio"/> Introspection and realisations	11	39
	<input type="radio"/> Civilian therapy	1	4
	<input type="radio"/> Professional help	9	19
<input type="checkbox"/>	<input type="radio"/> Masculinity	0	0
	<input type="radio"/> Challenging masculinity expectations	1	1
	<input type="radio"/> Contradictions	2	4
	<input type="radio"/> Debate of toxic masculinity	1	3
<input type="checkbox"/>	<input type="radio"/> Military culture	5	7
	<input type="radio"/> Alcohol consumption	1	1
	<input type="radio"/> Being themselves despite the culture	3	8
	<input type="radio"/> Camaraderie	3	3
<input type="checkbox"/>	<input type="radio"/> Military identity	7	15
	<input type="radio"/> 'Missing out' on combat operations	3	7
	<input type="radio"/> Always being identifiable as ex-military	1	2
	<input type="radio"/> Being a soldier making them untouchable	4	5

	<input type="radio"/> Personal identity	1	1
	<input type="radio"/> 'what ifs'	1	1
	<input type="radio"/> Aversion to failure	4	14
	<input type="radio"/> Being an all-rounder	3	7
	<input type="radio"/> Physical exercise	2	4
	<input type="radio"/> Absence of physical exercise	5	7
	<input type="radio"/> Acceptance of lowered ability now	2	4
	<input type="radio"/> Adapting to the physical exercise in the mi	2	2
	<input type="radio"/> Transition	3	4
	<input type="radio"/> Contrast of civilian life	8	18
	<input type="radio"/> Difficulty adapting to civilian life	3	6
	<input type="radio"/> Distancing self from the military	1	13

Appendix J

Example transcript at the initial coding stage

Key: R=researcher (grey background). P=participant. []=clarifications. References to potentially identifiable information redacted using black background.

Speaker	Interview (Brian)	Codes
R	<p>So again, thank you for your time today.</p> <p>The first question that I would like to ask is about the questionnaire beforehand, which asks do some information about the nature of your service and you know, the nature of your physical and mental health difficulties. You mentioned that you are an above the knee amputee. Could you just talk to me a bit more about this and how it happened?</p>	
P	<p>It, it was, I had three operations when I was in the army. I had a medical discharge for it. Initially it was a just an injury that I picked up whilst on tour of [REDACTED]</p> <p>Which has got progressively worse over time. So initially it was a torn cartilage. I didn't even know, but when they were ready to patch that they found a hole in the weightbearing side of my knee.</p> <p>So the next operation was quite a new operation for myself and two others. We were the [REDACTED], so bone and cartilage taken out of the outside my knee, to put over the hole that was in my weightbearing side of it.</p> <p>To try to grow it into the hole, where it had worn out worn for so long. It didn't stay because they went in again to see if it took to it, but it didn't. It grew outwards, which is causing more issues with the rest of my joint in my knee.</p> <p>Over time from when I left the Army 2002 I had another 10 operations of different sorts.</p> <p>But progressively got worse, erm, I had an infection from one small surgery. That starts flaring up, but it also got into the bone which sped everything up like it from that point on I kept getting cellulitis in my foot, my name, my tib and fib are bowed out.</p> <p>I did have arthritis in my knee and my toes.</p> <p>By then it worked out that I had complex regional pain syndrome in my knees and that's a nerve condition and neurological condition.</p> <p>Erm, it's not a nice thing to have.</p> <p>They wouldn't operate from then on.</p> <p>And that's when I said about the amputation, and I agree with, it's probably the best thing that I could do and</p> <p>It was not only for physical health for my mental health as well, because obviously the pain, the constant pain of watching my life slowly be taken away</p>	<p>Three operations in army</p> <p>Description of injury</p> <p>Medical discharge</p> <p>History of injury</p> <p>Knee injury</p> <p>Injury operation</p> <p>Injury complications</p> <p>Leaving the military</p> <p>Further operations</p> <p>Injury operation</p> <p>Injury complications</p> <p>Arthritis</p> <p>Description of injury</p> <p>No further operations</p> <p>Journey to amputation</p> <p>Injury affecting life</p> <p>Mental health affected</p>

	<p>from me every day was drawing on the mental health, mental health side of everything as well. So yeah.</p> <p>That was six years ago.</p> <p>████ just gone, so █████ the █████, I think like that.</p>	
R	Yeah. OK. So █████, all these years in pain.	
P	<p>Yeah, constant was in pain.</p> <p>I was working but it got to the point it was after I had the infection. I had to start work because, like I say, that it got into the bones and I kept getting the cellulitis. The pain was worse than where I had the septicaemia, it also damaged my kidneys.</p> <p>Left me borderline diabetic as well, so it doesn't. It done some damage to me. So it was all, there was more reasons to have it done – the amputation than not having it done. So yeah, we went erm, down that route. Had many consultants and surgeons, they all completely agreed.</p>	<p>Constant pain</p> <p>Injury complications</p> <p>Severe pain</p> <p>Health risks</p> <p>Injury complications</p> <p>Journey to amputation</p>
R	So the amputation was in █████, and you said that it really helped your mental health to get that done. Can you tell me a bit more about that?	
P	<p>With the constant pain and not being able to work.</p> <p>It's just a massive, massive drag on my mental health, which is already bad anyway.</p> <p>And I've had on the run up to it. I'd had a lot of therapy, so everything would, I think it just fell into place at the right time.</p> <p>And it was straight after the operation I felt that lift from the mental health anyway, because I checked to make sure that they've done it and it just lifted me straight away because I'm not in pain.</p> <p>So yeah, it's just a real, real lift on it.</p>	<p>Unable to work</p> <p>Constant pain</p> <p>Mental health affected</p> <p>Professional help</p> <p>Mental health improved</p>
R	And you mentioned that you have complex PTSD as well.	
P	<p>My first trauma was when I was a child, about six years old. So, and different events through my childhood and from the army. And after the army.</p> <p>I think a big chain reaction of things. And it accumulated later. I had a massive breakdown roughly at the same time as I had the infection and also happened at a certain time, which was a good time for everything.</p>	<p>Mental health description</p> <p>Trauma as a child</p> <p>Mental health affected</p> <p>Breakdown</p>
R	Ah, OK. So what, what year was the infection?	
P	<p>That would probably be... █████...I'm not sure.</p> <p>I think it's pretty much been █████.</p> <p>Yeah, it's just before I got one of my dogs. So yeah, it would be █████, I just, I was working at the time as well.</p> <p>So I took time off work for a little while. I went back to work.</p> <p>For another year or so, and then they said.</p> <p>Maybe you shouldn't be working any more, because you're making it worse all the time.</p> <p>There's nothing I can really do so.</p>	<p>Injury description</p> <p>Unable to work</p> <p>Difficulty in working</p> <p>Work making it worse</p>

R	And you mentioned that you have received help for the complex PTSD, you've had therapy for this.	
P	Yeah, I have done. I initially had EMDR, which didn't work. I had a couple of sessions with that, and that just made me worse. CBT for quite a while, that's got to be around a year. I had it all out until I had my leg off. Then a few sessions after and then I said we want you to recover from everything first and then come back to us after that. Then see if I can go back to it.	Professional help EMDR not helpful CBT helpful Break from CBT
R	Yeah, of course. And just in terms of thinking about your body, I can imagine that the standards of keeping fit are probably quite, quite high. I'm just wondering if how has your body image, you know, your feelings about what, what you look like been since you left back in 2002?	
P	When I first left, I wasn't really that ... I mean, a lot of people when they first leave, they're not that worried about doing things or whatever else. It takes a while to sink in that you've left the army. So you just think you're on leave for a while, so you just, you know, carry on. In leave mode basically and then after a while you want to go the other way. Because I've known people to go the wrong environment, I've gone to find the gym. To to keep myself fit because it's something that I've always done and always had, I've done from, like, very young and it was always a good escape for me as well. For me, I used to run a lot and whatever else but once I left the army. I mean, I couldn't play in sports or run really. So I found the gym and it was, it's also sort of replacement for when you're in the army and you think, yeah. And then you've not got that. And you think, oh, maybe I should do something. Start lifting some weights or something to make myself... And that was always a part of my mental health as well because of the bullying I had real young or whatever else. Also in the army as well. Not as much, but you tend to think, you know, the green kit will help you. And then when I left, if I get a little bit bigger and I'm not going to get people to pick on me. Just progressing from there and the more you do it, the more you become addicted to it, yeah.	Leaving the military Difficulty accepting leaving Going the "other way" Always done exercise Exercise as an escape Injury limiting sport participation Similarities to the military Replacement for the army Protection in the green kit Equating being bigger with less bullying Addicted to exercise
R	Yeah. Yeah, of course. And in terms of you mentioned when we've got the green kit, it helped you. Can you talk to me a bit more about that? So in what kind of way?	
P	Erm when I was younger, erm it wasn't so much school life, it was my home life. I was getting a lot of bullying, whatever else at home and I think that when you, when you join the army and you put that green kit on it gives you a sense of. Not so much, in a way of erm, you can't touch me, because you've got other people here and you're all part of.	Earlier experiences Difficulty at home Green kit as protection Joint family

	<p>A joint family, you know, by it makes you think that you you're not going to get as much, or if any, like I did when I was younger.</p> <p>The problems off people, but if you did, you've always got other people there to back you up.</p> <p>So it's, it's a bit like a confidence thing wearing green kit if yeah if that makes any sense, yeah.</p>	<p>Untouchable as a soldier</p> <p>Confidence</p> <p>Protection from others, community</p>
R	<p>It does, and in terms of thinking about, so I'm just creating like a timeline here.</p> <p>So joining that army, was that 92?</p>	
P	<p>Yeah, 92 when I was 16, yeah.</p>	<p>Joined young (16)</p>
R	<p>You said that you, you were still keeping fit then. So you still kind of doing sports then and you've maintained that, I suppose you've maintained that throughout the time that you did serve, you know, up until 2002 and then ever since then.</p> <p>When you left the army in 2002 what was the role of exercise for you then?</p>	
P	<p>Erm, I think to start off with it was just to, to give me something else to think about other than work and it was like my little escape.</p> <p>So when you're training you, you tend to switch off from everything around you and that's your own little world. So you wish if you've got your problems, you got them all put to the back, switch off and you just worry about lifting the weights.</p> <p>But it's sort of over time with myself.</p> <p>It was to push heavier weights, to get bigger and also because of, because I'm quite short. Certain people used to look down on people like that. If you, you know, you're a short person, gonna be a weaker person. But, and I think that's still in the way that I train and whatever else now, I'm short so, I can prove to you that I can do what you do and probably more.</p> <p>And also to to stop, the umm, the people.</p> <p>Which is sort of a way to make yourself look bigger and a bit more intimidating.</p> <p>And whatever else, so people don't confront you, don't want to confront you.</p> <p>But not that it always worked like that 'cause you can have the people that wanted to because of, you're slightly bigger, why everybody else would get people for, you know, so I'll go in and see what he does to them.</p> <p>So yeah, if you train, one way works one way another the opposite. Yeah.</p>	<p>Exercise as an escape</p> <p>Exercise as a coping mechanism</p> <p>Exercise as a distraction</p> <p>Driving appearance ideals (to get bigger)</p> <p>"Compensate" for being short</p> <p>Exercise as proving himself</p> <p>Comparison to others</p> <p>Exercise as protection</p> <p>Untouchable if he is bigger</p>
R	<p>Yeah. OK. So thinking about the main thing. So a lot of that was escape.</p>	
P	<p>Yeah.</p>	<p>Exercise as escape</p>
R	<p>And this, like proving to yourself with others around you that you can, you know, be be something. And almost like a protection, I suppose.</p>	
P	<p>Yeah, it's that, that protection that is one of the biggest, would be the, I could, I could do this so I can be something as well.</p> <p>Because I was, when I was young, it was drilled into me that I like, I was going to be shit at whatever else from my mum and whoever man she had.</p>	<p>Exercise as protection</p> <p>Bullied in childhood</p> <p>Low self-worth</p> <p>Competitive nature</p>

	<p>It's like I've built a competitive side of me. I've watched people do things and I've, you know, I can do that as well-being unhappy to. I do. I do things, I push myself even more. Ever since I've had the my leg off, I have to push myself more. It's all the mental side.</p> <p>But it keeps me it keeps me peaceful. I don't know. Happy in a way.</p>	<p>Need to push himself</p> <p>High personal standards</p>
R	<p>Yeah. OK. So with the amputation in 2018. And you trained before that. You said that since the amputation you have kind of pushed yourself more than before you have the amputation, so even though you're, injured, still in lots and lots of pain, you still have the weightlifting.</p>	
P	<p>Yeah, I was, yeah.</p> <p>I think it was just again, it's people seeing me.</p> <p>Just looking at through other people's eyes and think, oh, he can't do that. He's, he's missing the leg or whatever. And then I'm like, yeah, I'll show you what I can do. And even though they're not interested, but I still.</p> <p>And there's still something in there saying, Yep, you can do it if you've found things in the army that people said you can't be and that that with a lot of my lifting is still, that army mentality is there.</p> <p>That you've got to do it. You've got to push yourself as hard as possible, really have that need to, but it's still there.</p>	<p>Needing to prove himself</p> <p>External validation</p> <p>Drive to succeed</p> <p>Military-like traits</p> <p>Needing to push himself</p> <p>Army mentality</p>
R	<p>Yeah. And when you are in gym, your lifting, would you say that? What are your main goals?</p>	
P	<p>I think it's a bit of everything, really.</p> <p>But I do like the strength side of it, I've always had that, I mean, before I had my leg off, I was doing disabled Strongman anyway.</p> <p>But the older I'm getting the more I'm leaning towards something a little bit easier, but I don't. I don't take it easy. I don't make it easy on myself. I have to push myself.</p> <p>To the limit all the time. Otherwise I'm not happy.</p> <p>I get annoyed about myself because I'm fail – I don't want failure. That's the one thing I try and avoid. And that again is due to my childhood and my time in the army.</p> <p>Failure is something I don't do very well with. I try and avoid things if I can instead of, erm, failing. And again, that's part of going to the gym as well. I gotta do it, cause I don't wanna fail.</p> <p>And I will push myself and yeah, so.</p>	<p>Goal-driven</p> <p>Desire to be strong</p> <p>Goal-oriented</p> <p>General wellbeing and longevity</p> <p>Needing to push himself</p> <p>Aversion to failure</p> <p>Needing to push himself</p> <p>All-or-nothing</p> <p>Gym as a way of achieving something</p>
R	<p>And let's just say if you didn't train, so if you didn't go to the gym, you know. How different would your life look now, do you think?</p>	
P	<p>Completely. Erm, completely different.</p> <p>It's a structure. It's part of my life where I'm saying it's keeps me going.</p> <p>it's an escape, I'm thinking if I didn't have that escape and structure or whatever else, I don't know where I would be, to be honest, really.</p>	<p>Routine</p> <p>Structure</p> <p>Attached to exercise</p> <p>Always done exercise</p>

	<p>You know, but, but I'm always had some form of fitness in my life. It's hard to think about where I would be if I didn't.</p> <p>Because it's always been my escape right when I was younger, it was running with football.</p> <p>In the Army, boxing, football, basketball.</p> <p>And now it's it's the gym, because I can't do any other sports and I can play some sports. But in wheelchair that. But I I don't want to do it that way, I'd rather do it the way I used to do, or not at all.</p> <p>So yeah, I think my life would be completely different. In a bad way. Yeah. And a really bad way. Umm.</p> <p>I was when I first left, I was drinking quite a bit, part of army life. And I've got to carry it on.</p> <p>I think I would have gone down that route. If it wasn't for the gym, also makes you want to eat healthy and just live a healthier life. There's no point in, you're not eating healthy, being healthy if you're not training, well, you're just. It's the whole object of training.</p>	<p>Exercise as an escape</p> <p>Different forms of exercise</p> <p>All-or-nothing mindset</p> <p>Alcohol when left military</p> <p>Going the 'other way' (alcohol)</p> <p>Exercise helps other parts of lifestyle</p> <p>All-or-nothing mindset</p>
R	<p>Yeah. You've said that it's a bit of everything. And, erm, it's part of your routine, you know, you have you have to go.</p> <p>Is there anything else that kind of motivates you to go and train?</p>	
P	<p>Erm, I think it's just, well an escape from everything. It really is.</p> <p>And then to and to push myself and to better myself every time I go than I did the last time and the image as well. Yeah.</p> <p>I used PEDs [performance enhancing drugs]. On and off for quite a few years, actually.</p>	<p>Exercise as an escape</p> <p>Needing to push himself</p> <p>Use of steroids</p>
R	<p>Do you think you could explain a bit more about that, sort of like what? What prompted you to to start taking them?</p>	
P	<p>I was living in down in [REDACTED] at the time and I've been training for, training quite a while. It wasn't until.</p> <p>I met a guy come back from. He was ex forces as well. He obviously done a lot of performance enhancing drugs, steroids and whatever and.</p> <p>Seems like a big, ripped guy. He kept saying to me. Just try it, you know.</p> <p>And then straightaway, you see the gains and you think, you know, like, this is going to help me get bigger and that image of me, a lot of it goes down to the image of me as a child because I was quite skinny everywhere else and I was quite easily erm bullied by my mom's boyfriend and that. So a lot of it, even from the army as well. That all goes back to the small skinny me that couldn't defend himself. If I make myself bigger then, I'm not gonna get the grief. And still, I sort of feel that relates as well.</p> <p>For the strength and building the size and, yeah, it it's it's tricky one it sort of explain that. I think it is that part of myself, bigger so, I'm not going to get bullied and pushed around or whatever else.</p>	<p>Reasons for steroids</p> <p>Appearance-driven</p> <p>Comparison to others</p> <p>Desire to be big</p> <p>Protection</p> <p>Sense of feeling addicted once he had seen results</p> <p>Bullied in childhood</p> <p>Defenceless when he was small</p> <p>Equating being physically bigger to being stronger</p>

	I think that boils down to for a lot of people. To be honest, I don't think that's yeah.	Physical size as protection
R	It sounds as though as well, you know, once you're able to see the results, it was that push to do it more, that kind of nature?	
P	<p>Yeah, definitely. Yeah, definitely. You see the results of it. Yeah. It's a little bit more.</p> <p>I wasn't, I've not, I've done it on and off. I haven't done it solidly. The only sort of, I think the most I've done is when I was going to do a bodybuilding competition last year.</p> <p>it was part of that whole diet and and whatever else, that was that was included in it. And I did get some really good gains to it and that really did. That was the most I've ever done. It did, er, fuel the drive which help as well so.</p>	<p>Steroid use intermittent</p> <p>Bodybuilding competition prep</p> <p>Steroids helped appearance</p> <p>Fuelled continued use</p>
R	So you mentioned you were going to do a competition last year, yeah. Were you able to do that?	
P	<p>I wasn't because obviously again this is part of the failure.</p> <p>I was pushing myself to it, but where I've lost a lot of weight really quickly in my stump shrunk and my leg wouldn't, wouldn't stay on so I couldn't carry on doing the cardio. I could have done the competition in a wheelchair on the stage. I wasn't going in for that. I was going in for on my prosthetic and standing up and doing it that way again because in the wheelchair, a bit vulnerable in your wheelchair.</p> <p>Whereas if I'm stood up, I don't. Yeah. So yeah, that was. I was absolutely devastated after it because we couldn't follow through.</p> <p>And do the competition. It did affect me. For quite a while, quite a few months. Didn't train for a few weeks after. Because it did really knock me.</p> <p>It was like being back to the army again, because you have a routine.</p> <p>The diet and everything and what have you got to do when you've got to do it and whatever else.</p> <p>It's like being back in the army again. You're, you're you've got you're seeing the goals that makes you do it even more.</p> <p>Saving firm when you're in the army, you're doing your training or whatever else, and you're seeing a better results or whatever. So yeah, it's.</p> <p>You can compare my training regime and the Army in a way so.</p>	<p>Aversion to failure</p> <p>Refusal to look more vulnerable</p> <p>Identification with prosthetic</p> <p>Acceptance of injury</p> <p>Injury part of identity</p> <p>Routine</p> <p>Exercise helps other parts of lifestyle</p> <p>Replacement for the army</p> <p>Similarities to the army</p> <p>Addicted to the results</p> <p>Similarities to the army</p>
R	Yeah. Yeah. So it's like it brought you back two days when you did it.	
P	Yes. Yeah, yes.	
R	Yeah. So it was like having that. The structure, having that routine, you know, you know what you've got to do, how much to eat, you know, when to when to eat it. So I can appreciate it must have been really difficult for you not to be able to do that.	
P	Yeah, it it did. When the decision was made. I was gutted, absolutely gutted. I don't think I trained about three in three weeks or so.	<p>All-or-nothing</p> <p>Training decreased</p>

	The whole diet went out the window. Everything. I just. I just felt rubbish for a few weeks and then dragged myself back to the gym again. Back into a routine again. Then you start feeling better about yourself again.	Routine left Cycle had to be restarted again
R	So it's having to force yourself back knowing that it's not something that you want to do right now, but you'll be grateful for it once, once it's done.	
P	Yeah.	
R	And thinking about identity more so, you mentioned that when you left in 2002, the transition was understandably quite difficult.	
P	Yes. Yeah.	
R	Can you describe to me a bit more about that and how you, how you cope at that point?	
P	Well, when you leave, it's the army is your everything when you when you're in it, because they do everything, tell you when to wake up, go to bed, the whole lot, it's your family. It's your life. And then from that to nothing is, and I joined at 16 as well, so I knew nothing other than school and army. I mean the strain to civvy life was quite a big drop at 26. So yeah, it was. It was hard to set into routines, and that, and I say for the first few months and when I left, I wasn't doing any training or anything. So I was slobbering it and. Yeah. No, real motivation or anything. Until I did start training and that that did help a lot, it really did help a lot. Finding a gym and the weights you are going to do. And start building up a routine and the structure again in life, whereas before that didn't have any, so it was so hard to adapt into civvy life from military. And I say from I went from child, a kid, straight into the military and 10 years so I knew nothing of how to look after myself, other than the Army or before that, from school or whatever.	Military identity Protected in a controlled environment Military family Contrasting civilian world Did not know how to look after himself No routine Exercise as routine Not prepared for civilian life Culture shock
R	Yeah.	
P	Massive, massive shock. Yeah, a lot of people. I mean, I did struggle when I first left, probably for the first few years. The gym was a structure. But the army is completely different way of life to civvy life. You can argue back, I mean, you're not gonna get, not gonna get the sack or nothing. And yeah, I went through a few jobs so. That wasn't the best, it is really hard to transition.	Culture shock Initially struggled Structure of gym Contrast of civilian employment Had different jobs Struggled with the transition
R	Yeah. And you're saying that for that, the gym was a was a really helpful thing then.	
P	Yeah, it was a big, big step. It's hard to get back in. So once you get into it, it's just gets easier every time.	Need to maintain routine
R	In the army, you said that you know, it's all that you knew because you joined at a really young age. You said that you joined that you have that sense of you know, you're being, you're part of a team and you're not just you.	

P	Yeah.	
R	You also talked about how your upbringing was really quite difficult. It's when you were a child, how did your mental health in the military compare to where you were? Well, compared to before that.	
P	<p>When I joined, it's, it's like starting again. It's like hitting a bit of a reset button for a while because.</p> <p>You're, you're meeting other people that when I joined around the time I joined, there was a lot of people from a lot of broken homes and all in sort of similar situations, all joined the army young.</p> <p>Because of reasons that none of us really spoke to each other about.</p> <p>Even I found one person that I could quite easily open up to and he was exactly the same with me.</p> <p>But yeah, it's.</p> <p>Because you become part of that family in the army. If you don't want to talk or ever else.</p> <p>You all go through the same things.</p> <p>In the army, you have ways of dealing with it while you're there. You normally laugh and joke about that because everybody's been through the same thing, but when you leave, don't think catch it up and it wasn't just the army stuff. It wasn't just my childhood. It was also the army stuff. So I had a lot of it all catch up with me in one go when I left.</p> <p>So the army, it, for quite a while, because everybody's in the same boat, you're all living together, you're all going through things that you see in the army. A lot of them at the same time. Or even, It's just part of army life. But when you leave, you become just part of normal life. And that may be that's when it does affect you.</p>	<p>Starting afresh when joining</p> <p>Reset button</p> <p>Adverse childhood experiences</p> <p>Joined army young</p> <p>Connection with others</p> <p>Part of the family</p> <p>Shared suffering</p> <p>Camaraderie</p> <p>Protected in the military from childhood</p> <p>Shared suffering</p> <p>Culture shock of civilian life</p> <p>Isolated</p>
R	<p>When you talk about that shield, I guess you spoke about the gym in like a similar way. So the gym was very much your, your shield, you can use the weights to kind of create something, that is protective I suppose.</p> <p>And in terms of thinking about, like, masculinity. Yeah, and expectations based of men. As, yeah, I guess the army is mostly men.</p>	
P	Yeah.	
R	<p>You've already mentioned before in terms of being, you said that you're quite commonly called like short and that using the gym was a way to show that, you know, you're more than that.</p> <p>So thinking about like expectations of men being a certain way. I mean, do, erm, do you ever feel as though there's pressures like concerning masculinity or other social pressures on you?</p>	
P	<p>I think because of the time that I grew up, midway through the 70s, 80s, and 90s. There was a lot more pressure, especially on men and even in the army at that time.</p>	<p>Generational masculine pressure</p> <p>Men do not show emotion</p>

	<p>Erm, you have to be a man.</p> <p>You know, not we couldn't really show any reasons.</p> <p>And again, I'll take that from the army and I'll take it into the gym with me as well. I can't show that I'm, that I'm weak in the gym even though I know I shouldn't do that because it's wrong. We're all training for different reasons.</p> <p>But erm yeah, I think. Back then, when I was in your, I mean, whatever else you.</p> <p>Yeah, you had to be put massively into being a man, couldn't be seen crying or anything. That's the era I grew up in.</p> <p>If you've seen doing that, you'll be called weak, whatever else, even though you wasn't, but you would say, yeah, I think it was, maybe still plays a good part in the way I live my life now.</p> <p>Just the way that I was brought up and whatever else, especially with the things that happened to me when I was a kid, that's.</p> <p>Yeah. I think that's why a massive part of masculinity. There were guys that were pretty, erm, weren't as masculine.</p> <p>They were saying that they got bullied. And so when you see that, I am going to be the stronger person. I'm gonna be the one that's not going to cry. I'm going to be the one that does everything.</p> <p>Doesn't complain and whatever else that are signs of weakness. So yeah.</p>	<p>Army is a man's job</p> <p>Being masculine in the gym</p> <p>Men do not show emotion –</p> <p>generational</p> <p>Men who show emotion are weak</p> <p>Ongoing influence now on his life</p> <p>“Less masculine”</p> <p>men got bullied</p> <p>Must be the strong one</p> <p>Must not show any sign of weakness</p>
R	And was this when you were in the army or before, when people, when like men would be like, bullied, who'd show more signs?	
P	<p>I think it was more in the army. But there was still parts of it in my childhood.</p> <p>But it was a big part of the army when I was in. But I was in really big part of it because I was my instructors and whatever else and my higher ranks, we've got some regiment that will be from the 70s, through 80s and 90s, so that sort of era was completely different to now. And then it was about, men have to be men, have to be strong, have to be masculine. And that's the way they projected into you in the army when I was in.</p> <p>So it was a big, big part of it. We've got to be masculine to be here. This is the army. You've got to be a strong masculine man to be here. You can't be anything else. It made you believe to that as well because it was rolled into you constantly. I think it was a big part of it.</p>	<p>Generational differences</p> <p>70s, 80s, 90s era different</p> <p>Men have to be strong and not show emotion</p> <p>Have to be masculine to be in the army</p> <p>Beliefs instilled in army</p>
R	And how do you feel about that? All of that now?	
P	<p>Yeah. It's still a part because it was grounded into me. So, so much from childhood and in the army, it still is.</p> <p>It's still there, although it's not as bad as it was, but there is still part of it there. I mean, I feel that I had a good look at it all when I had my massive breakdown. And I realised.</p> <p>You you can't be that masculine person all this with. It's not. Not even that, really. Is it? You can't be the constantly strong one. Showing weakness doesn't</p>	<p>Beliefs since childhood</p> <p>Breakdown precipitated realisation</p> <p>Introspection</p>

	<p>mean you're weak or showing emotions doesn't mean you're weak. That's what I meant to get at.</p> <p>Yes, to just a tricky one to answer really.</p>	Showing emotion does not equate with weakness
R	Yeah, of course. I think, erm, can definitely understand how it can be difficult, erm, especially when we know, especially when you might have brought up, believing in these things.	
P	<p>Yeah, it was drummed into us because we were 16 years old, we were in the army we're doing a man's job so we've got to be, we had to grow up quicker that's the best way to describe it and especially in like the very early 90s.</p> <p>There's still a massive, you're in the Army, you're, you can't do this. You can't do that. But that was just installed into you from the first day you got there.</p> <p>And if you was, if you did show, not weakness, but emotion, back then, that was classed as weakness. And then you'll get singled out so. You try not to show it. Even though there's no shame in showing it.</p> <p>But we didn't see like it back then, because it was drummed in that it is wrong basically. That's how it was. It was wrong. We shouldn't do that. You're not. You're a, you're a man, and you shouldn't be showing emotions or whatever else you should be holding them all in again, nicely. That's because of the era I've grew up in especially the 80s and not so much the 70s. But the 80s was very masculine time.</p> <p>For, men had to be men. You couldn't show anything.</p> <p>And like I say, that was all my instructors and whatever else all served through the 80s and bits of [REDACTED], [REDACTED] and things like that. So yeah.</p> <p>And you listen to 'em 'cause. You're just he was a young agent easily, easily led by them.</p>	<p>Responsibility at a young age</p> <p>Man's job</p> <p>Grow up quickly</p> <p>Connotations with being in the military</p> <p>Showing emotion is wrong</p> <p>Constantly told by others that emotion is weak</p> <p>Showing emotion is not masculine</p> <p>Generational differences of chain in command</p> <p>"Men had to be men"</p>
R	Yeah. It's all you know.	
P	Yeah, yeah.	
R	<p>And I wonder, erm, does your use of exercise link with this at all?</p> <p>You mentioned that since leaving, gym being your escape you would say, safety in some ways, in acting as protection, I suppose.</p>	
P	<p>It does help with the cPTSD stage as well. When I'm there and I'm lifting the weights, got my headphones in, I don't think about nothing.</p> <p>I'm just training, so everything is pushed to the back, pushed away and you're just concentrating on that and.</p> <p>Yeah, just it helps massively with, with my PTSD and my mental health. It's probably one of the biggest things that it does do. Training was, I've known when I've not been well or because of the operations when I've not been able to train, you can feel your mood going backwards and you just you can't wait to get back in, but then you've got the other the part where you've been out for a couple of months and you haven't made it in and the anxiety kicks in.</p> <p>Yeah. Like have to start all over again.</p>	<p>Exercise as an escape, helps with cPTSD</p> <p>Exercise as a distraction</p> <p>Exercise as a coping mechanism</p> <p>Mood declines when unable to exercise</p> <p>Increased anxiety</p> <p>"Have to start again"</p>

	<p>Erm, so yeah, it's. Yeah, my mental health is probably the biggest part of training more than anything, like say, we've got the issue, we'll make yourself look bigger and whatever else again, that comes down to the masculinity side again.</p> <p>I'm more of a man because I'm bigger. When really, you're not, it doesn't mean anything, does it really?</p> <p>So yeah, I think again that that that comes down to mental health as well.</p> <p>But it's, it's all, I think it all goes back to the mental health of myself.</p>	<p>Mental health central to exercise</p> <p>Exercise connected to masculinity</p> <p>Connotations of being bigger and stronger as a man</p>
R	<p>And in terms of when you say that with the lifting weights and being big, that it doesn't actually mean anything.</p> <p>What do you mean by that?</p>	
P	<p>Just because I my brain will - It doesn't matter if you've got your big muscle man or your a small skinny or whatever. You're still a man.</p> <p>No matter what, that's who you are. You're a man. It doesn't mean, it's just you've got a different lifestyle to somebody else.</p> <p>Again, it is pretty drummed into me so much over such a long time.</p> <p>That this is what I've got to be to be a man who's still fixing that even though I know it's wrong, it does still sit there and and and does that to me. Stuff that's just something that has always been that way. It's just been engrained in me that way. And it's a hard thing to get rid of. I know it's wrong to feel like that because. Like I said, it doesn't matter if you're short, tall, skinny, that whatever, you're still a man. Just still a woman. It doesn't, doesn't mean a thing whether you train or not.</p> <p>It's, it's just been ingrained with me for so long and it's just become a part of, part of me basically.</p>	<p>Acknowledge that having different lifestyles does not mean someone is less of a man</p> <p>Challenging masculinity expectations</p> <p>Beliefs engrained about masculinity</p> <p>Not fulfilling such masculine roles should not make someone less of a man</p>
R	<p>OK. Yeah, of course.</p> <p>And just going back a little bit, so in terms of, if you're OK, just talk about a bit more with the competition and you mentioned that you were going to do that in September.</p> <p>But you weren't able to, and were really quite affected by it. And you were able to kind of, get back to, well, get back to a similar place, in about 3 or so weeks but it took a while for you to, I guess have that motivation, that drive.</p>	
P	<p>That's right, yeah. I just thought with the competition, what's the point for a while? And then eventually I thought, well this is doing me no good sitting at home. I'm just making myself worse.</p> <p>Over the three, three weeks or so, I just felt worse and worse, and my mental health has taken massive part of it. In the end, I had to push myself to get myself back into the gym and once I'm back in, a week into it, I'm, I'm back on track and I'm back to my routine again.</p> <p>Yeah, it did knock me.</p> <p>In a really big way. I mean, seriously, my whole routine dying and the lot just went. I thought, what is the point? What is the point of doing that, which has</p>	<p>All-or-nothing mindset</p> <p>Decline in mental health with no exercise</p> <p>Return to routine associated with improved mental health</p> <p>All-or-nothing</p>

	<p>been another big part of? Because of my fail-, I don't like failure. That meant as much to me as the kit as well.</p> <p>And yes, I didn't do well with that.</p>	<p>Aversion to failure</p> <p>Exercise as important as the "green kit"</p>
R	And do you think that you try a competition again?	
P	<p>I'm hoping to next year, I have a lot of things that I want to sort this year first. And then I'll be I think I'll be a bit more prepared for the weight loss for my stump from whatever else.</p> <p>Next, if I do it again next year, which I probably will, I'll be able to do book appointments at certain points of the training. So if I do need any adjustments to my socket for my prosthetic, then I can have them done and not have to wait and they might not risk not being able to have it done until after the competition and then again I've knackered myself not being able to follow through and do my ultimate goal getting all the on the stage and that.</p>	<p>Goal-driven</p> <p>Bodybuilding prep next year instead</p> <p>Need to adjust around the disability</p> <p>Better preparation</p> <p>Goal to go on stage with the prosthetic</p>
R	Yeah of course. I can appreciate a competition prep is difficult enough as it is.	
P	<p>Yeah, it's going to be doubly, doubly hard for me. So the, the shrinking, size and volume of my, my stump because I won't notice it for a while.</p> <p>And then all of a sudden, it will drop really quick. And that's what happened. It literally went overnight to the point I couldn't even take a step without my prosthetic falling off and it was just a nightmare.</p> <p>And I I said I was saying to the guy that was coaching me, so I actually physically cannot do it now, but I don't want to go in my wheelchair because it's not what I'm not why I'm doing it for.</p> <p>I'm not doing it to be wheelchair competitor, I am doing it to be able to stand up on stage. Again that's what's drummed into me is the masculinity again.</p> <p>Cause, you think of someone in a wheelchair, you don't – the way it was seen many years ago. Was they weaker and whatever else? They're not. Some of the wheelchair competitors are unbelievable.</p> <p>But again, because it was the year I grew up in it, it affected not just myself, a lot of people, the era we grew up in.</p> <p>So many things were wrong and you had to be, that strong man in the wild that everybody can turn to. But that was just the way we grew up. So.</p>	<p>Difficulties with prosthetic</p> <p>Adapting to changes in body</p> <p>Equated wheelchair with weakness, not part of his identity</p> <p>Prosthetic part of him</p> <p>Wanted to show his strength on stage</p> <p>Wheelchair "not masculine"</p> <p>Generational masculinity norms</p> <p>Specific to era grew up in</p> <p>Need to be the strong man</p>
R	Yeah, of course. And you've been living your life in the past six years now. In a in a certain way, you know the prosthetic is part of you. I guess you want to show who you are from that stage.	
P	<p>And I think that's probably the best way to put it. It's maybe not. I'm not the wheelchair person, I am using the prosthetic.</p> <p>That is me now. Yeah, I think that's probably the best way to put it, that's part of me, it's who I am.</p>	<p>Prosthetic part of identity</p>

R	Yeah. Yeah. And how do you feel about that being part of you? How do you feel about that being, you know, part of your identity?	
P	<p>Erm, I don't feel, really, I don't - It makes me push myself more, if anything. To prove to a lot of people, it doesn't matter if you do have a disability. If you want something, you will push yourself to get it.</p> <p>So yeah, I mean, I don't know if I'd be the same if I was in a wheelchair or not, because I absolutely can't use a wheelchair because of the vulnerability and whatever else.</p> <p>Yeah. So it's definitely part of me now, it's, it's who I am. It's, it's me.</p> <p>I can't, I just struggle to remember what I was like before it, because not just through the pain.</p> <p>But I also have the mental health going on. I had a lot of things going on at the same time, a lot of it for, probably about four or five years before I had my leg off or something. Pretty much a mess and a lot of like, a lot of normal time has been without the routine and whatever else that I've had. So yeah, so definitely part of me.</p>	<p>Need to push himself with exercise</p> <p>Need to prove himself despite disability</p> <p>Equating wheelchair with weakness</p> <p>Prosthetic part of identity</p> <p>Mental health decline before the amputation</p> <p>Mental health decline without routine</p>
R	Yeah. What I'm hearing is that it really changed your life for the better?	
P	<p>Yeah, absolutely. I think you're 100%. I'm, not once I regretted it and not once, some things take longer, some things are harder. Some things I can't do. But that's just part of being an amputee and it will be. And I'm aware of that, but yeah, it's who I am now so.</p> <p>It has, yes, it's lifted in my life massively.</p>	<p>Best decision to amputate</p> <p>No regrets</p> <p>Accept a change in capabilities</p> <p>Need to adjust</p> <p>Improved his life</p>
R	I'm just thinking about also that but going back to those kind of masculinity norms about being strong, and feeling like you can't show sadness and you know any kind of insecurity. How do you feel right now about reaching out for support? Like, do you feel able to reach out support?	
P	<p>I'm probably more, I can reach out for help. As soon as I had my CBT. I've been able to reach out a lot more for help. Whereas before I wouldn't. I, all my problems always pushed away, hidden away. I'll help other people because it's what I've I had to do.</p> <p>But now if I've got a problem I will reach out for help. I can struggle at times, but yeah, I think it has changed me in that way as well because I sometimes I have to ask for help to do things and it's made me again with this and with the after my CBT it's made me realise that you're not, if you don't ask for help, you're not always going to get to where you want to go. And it's true. If you need that help. No real shame in asking.</p>	<p>More able to reach out for support</p> <p>Civilian therapy</p> <p>Used to ignore problems</p> <p>Drive to help others</p> <p>Realisation – it is okay to ask for help</p> <p>Challenging masculinity expectations</p>

R	Yeah, absolutely. And just as well, I mean, how would you say your body image is currently? What are your feelings about how you look at the moment?	
P	Erm, not massively happy, but not massively down. I'll always say there's room for improvement on myself, because I'm probably one of my own worst critics. Yeah, I'm not, not overly happy or not the other way. Yeah. In the middle, I'm trying to lose a bit in the middle at the moment. Always try and get a little bit more everywhere else.	Body image now High standards for himself Own worst critic Still appearance-driven goals
R	OK. Thank you. I think I have covered everything. Was there anything else that you wanted to mention or talk about, or that you would like me to know if you think it might be helpful?	
P	I can't think of anything. Just that it's helped me with structure and routine. And it has in the past because of the confidence. Yeah.	Exercise as routine and structure Exercise to build confidence
R	Yeah. Absolutely. Thank you. OK, I think that's everything. I'll stop the recording now.	

Appendix K

Ethical approval following amendment

11/04/2024

Miss Laura Waddams

Health and Social Care

University of Essex

Dear Laura,

Ethics Committee Decision

Application: ETH2324-1085

I am pleased to inform you that the research proposal entitled "Engagement in body modification practices in male military veterans with injury, disability, chronic illness, and/or mental health conditions." has been reviewed on behalf of the Ethics Sub Committee 1, and, based on the information provided, it has been awarded a favourable opinion.

The application was awarded a favourable opinion subject to the following conditions:

Extensions and Amendments:

If you propose to introduce an amendment to the research after approval or extend the duration of the study, an amendment should be submitted in ERAMS for further approval in advance of the expiry date listed in the ethics application form. Please note that it is not possible to make any amendments, including extending the duration of the study, once the expiry date has passed.

Covid-19:

Please note that the current Government guidelines in relation to Covid-19 must be adhered to and are subject to change and it is your responsibility to keep yourself informed and bear in mind the possibility of change when planning your research. You will be kept informed if there are any changes in the University guidelines.

Yours sincerely,

REO Research Governance Team

Ethics ETH2324-1085: Miss Laura Waddams

Appendix L

Full Participant Information Sheet



Participant Information Sheet

Version 5

Date: 10th April 2024

ERAMS reference: ETH2324-1085

Physical exercise in male ex-Armed Forces personnel experiencing physical and/or mental health difficulties

My name is Laura Waddams and I am a Doctorate in Clinical Psychology student at the University of Essex. I would like to invite you to participate in a research study which is my third-year research project (thesis). Before you decide if you would like to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

What is the purpose of this study?

This study is interested in exploring the experiences of adult male ex-Armed Forces personnel with physical and/or mental health difficulties who engage in physical exercise. We hope to use this research to better understand the relationship between physical exercise and physical or mental health difficulties. This is to help our understanding of the experiences of ex-Armed Forces personnel, and in turn, inform appropriate support services.

Why have I been invited to participate?

You have been invited to participate because:

- You have identified as being male ex-Armed Forces personnel who has, or has had in the past, physical and/or mental health difficulties
- You have also identified as engaging in physical exercise

Approximately 15 male ex-Armed Forces personnel who satisfy the above criteria and would like to take part will participate in the study.

Are there any exclusion criteria?

If you are currently under the care of a Specialist Mental Health Service or secondary care mental health team, we regret to inform you that you will not be able to take part. This is because the interviews can touch upon sensitive topics and can feel vulnerable or exposing. If you are unsure whether you are able to take part,



University of Essex

please contact the lead researcher Laura Waddams ([REDACTED]).

Do I have to take part?

Taking part in this research study is entirely voluntary and is up to you to decide whether or not you wish to take part. If you do decide to take part, you will be asked to provide written consent. You are free to withdraw at any time, without giving a reason. A decision not to participate in this study, or withdrawal from the study, will have no impact on you taking part in any future research or access to any veteran charities or support avenues. Please contact the lead researcher Laura Waddams on [REDACTED] if you no longer wish to participate in this study, or wish to withdraw your data at any point during or following the study.

What will happen to me if I take part?

You will firstly be sent an online questionnaire to complete via Qualtrics. This will ask demographic information (such as age, sex, ethnicity) and additional information (such as the length of time in service, the type of physical exercise, etc.) You will also take part in an interview of around 60 minutes. This will be a one-to-one interview with the lead researcher Laura Waddams. This can either be online, using the Microsoft Teams platform, or in-person at the University of Essex in Colchester, Essex – it is completely your choice.

During the interview we will discuss areas around:

- Your experience with physical and/or mental health difficulties
- Your experience of taking part in physical exercise

The interview will be audio-recorded, which is just so that I can transcribe the interview afterwards. I will remove all information that could identify you (such as your name). Recordings will be transcribed immediately, and as soon as I have transcribed the recording, it will be deleted. Transcripts will be stored on the safe and secure university cloud (Box) which will also be password-protected – it will just be myself and my supervisor that have access to these recordings.

What are the possible disadvantages and risks of taking part?

It can often be challenging to talk about difficult and painful experiences. This might leave you feeling vulnerable and exposed, particularly if you have not spoken about this before. You can be assured that you be offered space at any point during, or after, the interview, to leave, or have a break and continue the interview another day or time, or withdraw. We will support you in any decision you make.

What are the possible benefits of taking part?



University of Essex

We believe that furthering our understanding of the experiences of ex-Armed Forces personnel is important, and an under-researched field. We cannot guarantee any specific benefits that you will obtain individually as a result of the study, but when you have access to the finished research study, sometimes reading about others' experiences, whether similar or not to you, can be really helpful.

What information will be collected?

In the questionnaire, you will be asked demographic information including your year of birth, ethnicity, religion, and highest level of education, amongst others. This questionnaire will also ask about when you served in the Armed Forces, which service, the type of physical activity you take part in, and further information about your physical or mental health difficulties. The interview will be of a conversation exploring further about physical exercise and physical or mental health difficulties.

We will anonymise all data we collect after the recordings, which means that we will take out any information that might identify you – such as your name, and any other potentially identifying information you share during the interview.

Will my information be kept confidential?

All information will be kept confidential. However, if there is a chance that during the course of the research you disclose information that leads me to believe that you or others are at risk of harm, I have a duty of care to inform an appropriate authority. For example, I would need to inform the NHS crisis team if any issues around suicide, self-harm, or safeguarding others, arise.

I will remove all information from both the questionnaire and interview that could identify you (such as your name). As soon as I have transcribed the recording of the interview (immediately after the interview), the recording will be deleted. Transcripts will be stored on the safe and secure university cloud called Box. PCs or laptops that I access these transcripts from will be password protected, and I will encrypt all data files.

Only myself as the lead researcher (Laura Waddams) and my primary supervisor (Dr John Day) will have access to your research data, both during the project and after the research has been completed. We will retain the transcripts for a period of 10 years after the project has been completed. The Research Data Management Policy of the university also requires that research data are made available for access and re-use where it is appropriate. If you do not wish your data to be made available to the research data repository, please do inform the lead researcher ([REDACTED]).

What is the legal basis for using the data and who is the Data Controller?



University of Essex

In line with the GDPR, we will collect written consent prior to the interview. This will be provided in a separate document. Informed consent allows us to process the data. The Data Controller is the University of Essex, and the contact is the University Information Assurance Manager ([REDACTED]).

What should I do if I want to take part?

Please contact the lead researcher Laura Waddams via email ([REDACTED]) if you have any questions about the study, if you are unsure whether you can take part, or to express your interest in participating in the study.

What will happen to the results of the research study?

I hope to publish the results of this study as a journal article and possibly via other avenues, such as relevant charities. Your data will be anonymised and completely unidentifiable. This research will also be available in the University of Essex Open Access Research Repository. I will email you upon completion of the study to ask if you would like a copy of the research.

Who is funding the research?

The research is being funded by the University of Essex.

Who has reviewed the study?

The study has been reviewed by the University of Essex Sub Committee 2.

Concerns and complaints

If you have any concerns about any aspect of the study or have a complaint, in the first instance please contact the principal investigator of the project, Laura Waddams, using the contact details below. If you are still concerned, you think your complaint has not been addressed to your satisfaction, or you feel that you cannot approach the principal investigator, please contact the supervisor of the research, Dr John Day ([REDACTED]). You can also contact the departmental Director of Research in the department responsible for this project, Camille Cronin ([REDACTED]). If you are still not satisfied, please contact the University's Research Integrity Manager, Dr Mantalena Sotiriadou ([REDACTED]). Please include the ERAMS reference which can be found at the foot of this page.

Name of the Researcher/Research Team Members



University of Essex

Researchers: Laura Waddams (Lead Researcher – [REDACTED]), Dr
John Day (Primary Supervisor – [REDACTED])

Research Team: University of Essex, Department of Health and Social Care

Appendix M

Oral consent script

Hello [again], my name is Laura. I'm currently doing my Doctorate in Clinical Psychology at the University of Essex. I am investigating the role of physical exercise in male ex-Armed Forces personnel with mental or physical health difficulties.

If you choose to be a part of this project, here is what will happen:

You will have already completed the questionnaire, which asked about both demographic information and information relating to the research, like physical exercise and how many years of service in the military you did.

You will now also take part in an interview of around 60 minutes. This will be a conversation about physical exercise and your experience of physical/mental health difficulties. If I think we need more time, I will ask you at the end if you would be prepared to return for a follow-up interview – it is of course your choice if you wish to.

The answers which you provide will be recorded through an audio recording.

All information collected will be kept securely and will only be accessible by myself and the research team directly involved in the project. Data will be anonymised and if data which you provide is used in any publications or reports then a pseudonym will be used and identifying details will be removed.

Your participation in this study is completely voluntary and you can withdraw from it at any point without having to give a reason and without penalty. I will also remove your questionnaire results and any information you shared with me.

Due to the nature of the subject of the research, that there may be some questions which might be difficult for you to answer. Do you understand that you have full autonomy during the interviews and can decline to answer any questions? Again, as above, you can withdraw from the interview if you would prefer.

You should have already received via Qualtrics and email a copy of the Participant Information Sheet which outlines your rights as a participant in this research. It also contains the contact information of myself and my supervisor should you need to contact us in the future.

The data collected about you will be used to support other research in the future, and may be shared anonymously with other researchers.

Do you give permission for myself as the researcher to take an audio recording of the interview? This will be stored on the secure university cloud (Box) and deleted immediately following timely transcription of the data. These transcripts will be fully anonymised with all identifiable data removed. These will be deposited in the University of Essex data repository, so that they will be available for future research and learning activities by other individuals.

Do you give permission for me to re-contact you to clarify information?

Do you have any questions?

Are you happy to take part?

Appendix N

Signposting sheet

Further support



Veterans UK provide **welfare support for veterans of any age** and their **families** through the Veterans Welfare Service and the Veterans UK helpline.

Freephone (UK only): **0808 1914 2 18**

Telephone (overseas): **+44 1253 866 043**

Email: **veterans-uk@mod.gov.uk**

Normal service **8.00 am to 4.00 pm Monday to Friday**



NHS 111 offers **medical assistance for veterans** in:

England: **NHS 111 service** or **call 111** when you need medical help fast but it's not a 999 emergency, or contact NHS

Scotland: **Scotland's Health on the Web** or **call 111**

Wales: **NHS Direct Wales** or **call 0845 46 47**

Northern Ireland: **nidirect government services** - telephone contact details are available from the website



The Veterans' Gateway is for any **ex-service personnel and their families** looking for **advice or support** – whatever they're dealing with. They provide the first point of contact to a network of military and non-military partner organisations to help you find exactly what you need, when you need it - whether you're in the UK or overseas. For **24-hour support** go to Veterans' Gateway or call **0808 802 1212**.



Combat Stress is the UK's **leading mental health charity** for veterans offering free treatment and support to **ex-servicemen and women of the UK Armed Forces**.

Telephone: **0800 138 1619**

Text: **07537 404 719**

Email: **helpline@combatstress.org.uk**



Samaritans offers a safe place to talk. You can call the Samaritans 24/7 from any phone free in the UK.

Telephone: **116 123**

Email: **jo@samaritans.org**