Military Sports Recovery Athletes' Perspectives on Role of the Coach in Athletes' Well-Being: The Importance of Supporting Basic Psychological Needs

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Abstract

The purpose of this study was to investigate the experiences of athletes in a competitive military sports recovery program with a specific focus on the extent to which coaches supported, or frustrated, athletes' basic psychological needs. Eight military veteran athletes competing in parasport took part in semistructured interviews. The accounts of their experiences of working with coaches in this context and their influence on their psychological needs and well-being were thematically analyzed. Results demonstrated that coaches' behaviors that support basic psychological needs can have positive effects on athletes' well-being and support their wider rehabilitation. Furthermore, frustration of these needs through controlling behaviors contributed to psychological ill-being. Findings suggest practical implications to help inform coaching practice to support optimal recovery and an environment that promotes well-being.

Keywords: self-determination theory, coach-athlete relationship, veterans, mental health, rehabilitation

Research has demonstrated significant postcombat issues experienced by military personnel who have suffered from physical and mental trauma, such as loss of self-identity (Koren et al., 2005; Melcer et al., 2010; Sutton et al., 2023), employment struggles (Zogas, 2017), anger management (MacManus et al., 2012), substance and alcohol abuse (Harmless, 1990; Sutton et al., 2023), and difficulties in maintaining relationships (Kintzle et al., 2018; Sutton et al., 2023). There is also evidence of mental health challenges, such as posttraumatic stress disorder (Enos, 2015; Kintzle et al., 2018; Koren et al., 2005; Schnurr et al., 2000) and other negative psychological responses (Eversen et al., 2009; Walker, 2010). As a result of significant physical or mental trauma, injured military veterans may face additional challenges, such as adapting to new physical constraints (Messinger, 2010), which are likely to affect perceptions of independence and ability (i.e., autonomy and competence; Enos, 2015; Peacock et al., 2019; Sutton et al., 2023). While dealing with new physical impairments, the injury may have also resulted in medical discharge from the military and simultaneous loss of their friends, home, and career, which are likely to affect perceptions of connections with important others (i.e., relatedness; Kintzle et al., 2018; Peacock et al., 2019; Sutton et al., 2023). Researchers have also demonstrated the impact of service-related injury on military personnel's psychological well-being (Kashdan et al., 2006; Lundberg et al., 2011).

One approach that seeks to combat the challenges faced by injured military personnel are military sport recovery programs. These programs aim to provide wounded, injured, and sick military veterans with an opportunity to use sports to support their pathway to rehabilitation from mental and physical trauma (Caddick & Smith, 2017; Enos, 2015; Messinger, 2010; Roberts et al., 2019; Shirazipour et al., 2018; Sporner et al., 2009; Sutton et al., 2023). In the United Kingdom, these programs are embedded within large organizations, such as Help for Heroes, Battleback, and Invictus, as well as many other smaller charities. Opportunities are provided from recreational to performance levels of sport, with some athletes competing in the highest echelons of international competition such as the Paralympic Games. One of the smaller charities which operates in this domain is the Armed Forces Para-Snowsport Team (AFPST), a sports recovery charity which uses competitive winter sport to assist in the freedom, recovery, and transformation of military personnel who become wounded, injured, or sick during military service. The AFPST was founded in response to interest in winter sports from veterans wounded in Iraq and Afghanistan during the conflicts which began in the early 2000s and provides

opportunities through a performance pathway from foundation to elite level. It is led by a board of directors, management team, and coaches who have qualified through the British Association of Snowsport Instructors pathway, all of whom are volunteers. To date, the AFPST has approximately 80 active winter sport athletes who participate in the United Kingdom and overseas opportunities organized by its staff.

Research in "mainstream sport" has demonstrated relationships between the coaching environment and athletes' motivation and psychological well-being (Adie et al., 2008; Gagné et al., 2003; Mack et al., 2011; Reinboth & Duda, 2004, 2006). In particular, coaching behaviors (Bloom et al., 1999; Potrac et al., 2002), the coach–athlete relationship (Mageau & Vallerand, 2003; Olympiou et al., 2008), and the motivational climate (Allen & Hodge, 2006; Hodge et al., 2014) have been shown to influence athletes' psychological needs, motivation, and well-being. To date, however, little is known about the psychosocial environment of competitive military sport recovery programs, their impact on athletes, and, more specifically, the role of the coach in shaping this environment. Without a supportive sporting environment in which athletes can thrive, the effect of a military sports recovery program may be limited.

A useful lens through which to examine the role of the coach in this context is the welldocumented subtheory of self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000) and basic psychological needs theory (BPNT; Ryan & Deci, 2000; Ryan & Frederick, 1997). This proposes that self-determined motivation *and* psychological well-being are optimized through the satisfaction of three basic psychological needs: autonomy (i.e., the sense of volition to make one's own choices and decisions), competence (i.e., to feel that one is effective in their actions), and relatedness (i.e., the feeling of connection or belonging to something deemed worthwhile). Research in sport has generally demonstrated support for the propositions of BPNT (Adie et al., 2008; Gagné et al., 2003; Mack et al., 2011; Reinboth & Duda, 2004), and in the military context, research has demonstrated the positive psychological effects of multiactivity sports courses, where delivery and outcomes were grounded in SDT (Peacock et al., 2019; Sutton et al., 2023).

Engagement in sport can provide military veterans with an opportunity to satisfy psychological needs in an environment with similar social and environmental characteristics as they have experienced during their time in the service, such as the requirement for teamwork, courage, and physical endurance. But without a supportive environment in which to thrive, the effect of a sports recovery initiative may not succeed in its ultimate intentions.

Researchers have previously indicated the importance of instructor knowledge when supporting wounded, injured, and sick veterans, but also an approach which includes compassion and focus on building social connections and promoting autonomy (Shirazipour et al., 2018, Shirazipour & Latimer-Cheung, 2020). It is hoped that developing a deeper understanding of how coaches shape the environment that supports, or thwarts, veterans in their recovery journey during engagement in competitive sport will be useful for those tasked with coaching athletes through competitive programs as well as to provide insight for other stakeholders working with injured military personnel.

In summary, military personnel can experience significant postcombat challenges and issues that negatively affect their psychological functioning. This is often exacerbated when accompanied by a life-changing injury. Military sport recovery programs have emerged as one means to support injured military personnel in their rehabilitation and recovery journeys. While research suggests more generally that sport has many psychological and social benefits for athletes with disabilities (Anderson, 2003; McCann, 1996), little is known about the experiences of injured military personnel engaged in competitive sport recovery programs. Therefore, the purpose of this study was to investigate the experiences of athletes in a competitive military sports recovery program with a specific focus on the extent to which coaches supported or frustrated athletes' basic psychological needs. It is hoped that practical implications will help to inform coaching practice to support optimal recovery and an environment which promotes wellbeing.

Methods

Methodology

To inform coaching practice, in this case in parasnowsport, the study adopted a pragmatic approach that emphasizes creating actionable knowledge (<u>Poucher et al., 2020</u>). The psychological environment fostered by coaches is integral to, but part of, the coaching process. As noted by Cruickshank and Collins (<u>2017</u>), pragmatism is an effective lens for considering specific aspects of the coaching process rather than the entirety. Consequently, a relativist ontology was adopted, acknowledging that reality is interpreted through diverse perspectives and

experiences. This was paired with the understanding that knowledge emerges through enquiry as researchers and participants interact and share experiences (<u>Poucher et al., 2020</u>).

Participants

For ease of writing, participants will be referred to as athletes for the remaining sections of this research as the charity ethos of competitive winter sports considers them as such. Eight para-athletes (three females and five males) were interviewed in this study. The participants were recruited from the AFPST and compete in alpine skiing, snowboarding, and cross-country skiing. The participants were at varying stages along the AFPST performance pathway, all were competing at Europa Cup level, and six were Paralympians. All of the athletes had been involved with the charity for more than 2 years (M=4), and their inclusion represented single- and double-limb amputations and spinal injury. Some of the athletes also had a history of posttraumatic stress disorder and other mental health disorders. No visually impaired athletes were included in this study due to the extra dimensions involved in supporting autonomy for these athletes, such as the requirement for an on and off snow guide. All athletes had experienced coaching in more than one sport or program throughout their recovery process, and their answers describe interactions and experiences across all of these.

Procedure

Ethical approval was obtained through the University of Stirling ethics committee before athletes were initially approached to discuss the research. The purpose of the study was explained, including assurance that anonymity would be maintained, and all athletes agreed to participate. Each participant was assigned a unique code (e.g., Athlete 1, Athlete 2, etc.). They were then sent information sheets and asked to sign consent forms before data collection began. Online meetings were conducted due to the geographical dispersion of the athletes across the United Kingdom. Each interview lasted between 30 and 45 min and was transcribed verbatim, generating a total of 38,453 words. Transcriptions were analyzed thematically to develop an understanding of the participant's experiences and address the purpose of the research.

Data Collection

A semistructured interview guide was designed, based on the research purpose and a review of the literature on SDT, BPNT, and well-being. The guide was used as a prompt, to ensure that the major questions were answered, but the interview itself was semistructured in nature, to allow scope for the interviewer to expand upon areas of personalized interest and to encourage open conversation (<u>Patton, 2002</u>). It was important that the interviewer was sensitive to areas that might cause distress for the athlete, such as recall of an event that caused stress or anxiety, and the interviewer was careful to allow athletes to talk freely and tell their stories, or alternatively, change a subject if they felt unhappy talking about it (<u>Sparkes & Partington, 2003</u>).

An informal pilot interview was conducted with an experienced athlete, who had now retired from competition, to test the interview guide and provide valuable feedback following debrief. This resulted in slight alterations to question wording to allow for a greater depth of information to be gathered and the inclusion of an interviewer's definition of well- and ill-being, once athlete awareness of the term had been established. The pilot interview was not included in the overall results.

The interviews comprised four broad sections: (a) introductory questions about participants' involvement in sport and the AFPST to help participants to feel comfortable with the process, (b) questions about perspectives on their well- and ill-being, (c) questions encouraging athletes to reflect on their own positive and negative experiences and the part played by the coach, and (d) an opportunity to talk about any other experiences that they wanted to share or felt relevant to the interview.

Data Analysis

The interview transcripts were interpreted using a sensitizing approach (Patton, 2002), where thematic analysis was employed by identifying and categorizing patterns in the data (Braun & Clarke, 2006; Braun et al., 2016). Familiarization of the recordings was conducted by first listening, while taking initial notes, then transcribing verbatim into text. The text was then read several times, and the process of open coding (Taylor, 2014) began. Excerpts were identified according to their relevance to the research purpose, analyzed for both semantic and latent content (Braun et al., 2016), and labeled by assigning a phrase which best described the content, such as "coach listens" or "mutual respect." These formed the initial data units. These units were then examined for recurring or significant themes by connecting them through the process of axial coding (Taylor, 2014). For themes to be developed, the analysis must have revealed a topic of conversation which had recurred in at least two of the transcripts or were considered by the authors to have particular significance (Taylor, 2014).

The theoretical framework, SDT, provided sensitizing concepts for the analysis (<u>Patton</u>, <u>2002</u>), specifically in relation to autonomy-supportive and controlling coaching behaviors, which

were perceived to impact athletes' psychological well-being. As such, the initial data units were organized into lower order themes framed by the work of Mageau and Vallerand (2003; autonomy-supportive behaviors) and Bartholomew et al. (2010; controlling behaviors). This approach was largely deductive; however, we also stayed "open" to concepts that did not "fit" with the SDT-framed sensitizing concepts. Through this process, the initial data units were organized into 10 lower order themes and further categorized into four higher order themes for discussion.

Research Credibility

Features of the research process which contribute to the credibility of the findings include the first author's prolonged engagement in the context. The first author has served in the military and coached and managed a military sport recovery program with a performance focus. In addition, the second and third authors have experience as coaches in performance pathways as well as expertise in SDT, all of which was beneficial when it came to constructing meaning behind athletes' thoughts (Smith & McGannon, 2018). The first author's engagement as a coach in the context meant that she was involved in the direct coaching of four of the athletes was known to two of the participants, and had mutual contacts with the others. An acknowledgement of the power relations during the interview that may exist as a result of this must be highlighted (Potrac & Jones, 2010) and although it presents a potential limitation to the study, it also assisted in creating an environment of trust in which the participants felt secure in divulging personal accounts which were relevant (Smith & Sparkes, 2016). Furthermore, the semistructured approach to the interviews encouraged participants to provide a thorough description of their experiences and perceptions (Smith & Sparkes, 2016). The analysis also included reading the transcripts several times to deepen their understanding (Braun & Clarke, 2006). The process of interpreting and organizing the data into the relevant themes was assisted through critical discussions between researchers, where interpretations were challenged and developed (Smith & McGannon, 2018).

Results

The four higher order themes developed captured the participants' experiences as athletes in a military sport recovery program, their perceptions of coaching behaviors, and the impact on need satisfaction and well-being. The four themes were: it's a journey of rediscovery in which sport and the coach were instrumental, fostering relatedness formed a foundation for re-imaging themselves and their capabilities, fostering a sense of autonomy and competence was critical to athletes' motivation and well-being, and need-thwarting coaching behaviors negatively impacted athletes' well-being. The following section describes each high-order theme along with illustrative quotes.

It's a Journey of Rediscovery in Which Sport and the Coach Were Instrumental

While serving in the military, service personnel have often experienced a strong sense of purpose, and within their unit, they have been nurtured through each stage of their career, to perform peace and war time roles to a high standard, with a high degree of autonomy. Leaving military service under normal military retirement circumstances is typically eased by a period of transition, a 2-year formalized resettlement period. However, often, as was the case with the athletes in this study, injured service people have not planned to leave and have not thought about a life after their military career. As they unexpectedly transitioned from military into civilian life, with the added complexity of acquired physical or psychological trauma to cope with, several of the athletes discussed a loss of self-identity or how the concept they had of themselves was forced to change. Engagement in the sport recovery program helped them to address this transition in identity. Athlete 4 commented that "I did feel like I'd lost my place in society. I've felt like I didn't have a role. So actually, when I became part of the team, I felt like I could identify as being part of something."

Several athletes explicitly described their unexpected transition into civilian life as a "journey." A journey supported by their involvement in a sport recovery program and a coach playing a significant part in nurturing their successful evolution as an athlete and as a person. Athlete 6 commented, "my coaches started me on and led me through this athlete pathway. The coaching model they employ, the environment and culture they have created . . . is really what has fostered a sense of well-being as an athlete." Athlete 1 also noted,

It [the sport program] was used as a form of . . . rehabilitation tool to regain physical activity, but also as that mental outlet and focus too, giving an enormous chance to focus on things and skills that I could attain, rather than worrying about the things that I'd lost.

The negative impact of injury and illness as a result of military service and the challenges faced when transitioning into civilian life are well documented (e.g., <u>Kintzle et al., 2018</u>; <u>Melcer</u> <u>et al., 2010</u>; <u>Walker, 2010</u>; <u>Zogas, 2017</u>); however, researchers have attempted to demonstrate

links between opportunities for sport in this cohort and a subsequent improvement in their overall confidence and well-being (Caddick & Smith, 2014; Jackson, 2013; Shirazipour et al., 2018). One such study by Shirazipour et al. (2018) hypothesizes that participation in sport may provide potential avenues for wider rehabilitation goals. Our findings therefore appear to contribute to the growing interest in the transformational power of sport as a vehicle for positive rehabilitation and recovery (e.g., Caddick & Smith, 2017; Enos, 2015; Peacock et al., 2019; Sutton et al., 2023). This was evidenced by the athletes finding a renewed energy and enthusiasm, not just for sport, but in other aspects of their life, fueled by the sense of pride felt in their sporting achievements. "The sense of achievement I get from skiing helped reignite the drive and motivation to achieve other things. This sense of achievement also carried over into other aspects of my life" (Athlete 5).

As part of the program, some were encouraged to become ambassadors for their sports recovery charity, or mentors to other athletes. These roles played a significant part in rediscovery of their sense of self which also led to feelings of pride and self-worth. Athlete 1 commented, "it's about performance, about achieving, it's about success, but being a good person is at the heart of it and having made a contribution to society at the end of it is very much there and is not an afterthought." This evidence of "giving back" to the community has been highlighted in other veteran research as a way to promote the benefits of sport, open communication channels, and encourage others to become involved (Shirazipour & Latimer-Cheung, 2020).

Fostering Relatedness Formed a Foundation for Reimagining Themselves and Their Capabilities

While relatedness has a more specific definition within SDT (Deci & Ryan, 1985; Ryan & Deci, 2000), it was helpful in the context of this study to approach it by using the concept to frame a wider picture of social connectedness such as inclusiveness, psychological safety, and supportive group culture. Athletes made references to coaches' actions that fostered camaraderie, cooperation with each other, and shared social support. The coaches and their actions were fundamental to fostering athletes' sense of relatedness and providing them with a firm foundation for their recovery to progress. Athlete 1 commented, "having that real togetherness and inward facing group, we learn from each other and the phrase we use is that the rising swell lifts every boat." Athlete 5 commented,

The instructors [coaches] knew that this was a key part of [recovery programme] so spending time as a group was encouraged, and was given almost as much importance as the actual skiing. The atmosphere and camaraderie there were key reasons I had such a positive experience, so definitely had a huge impact on my well-being and recovery.

Through the inclusive and psychologically safe environment they facilitated, coaches demonstrated their care for the athletes as people, and facilitated their motivation and well-being. Athlete 1 commented,

I think, for me, the coaches who get the best out of me are the ones who show the most respect to the athlete. Sometimes it can be perceived that a coach–athlete relationship should be more coach, less athlete Whereas I think I've had my better coaching experiences where . . . an athlete feels safe enough to communicate, safe enough to fail, safe enough to ask a stupid question and safe enough to dream.

Athlete 6 further highlighted the instrumental nature of the coach in creating this environment:

The team that I'm a part of, [recovery program] as a whole, does a great job of this, my coach being a key part of that structure. They champion us as athletes and the journey we are on. Within our alpine team, we spend a lot of time away together, and we get a lot done effectively working together and helping each other. That environment and culture is set and developed by our coaches.

Through conversation, the athletes were able to demonstrate occasions where the actions of coaches in a military competitive sport recovery program created an environment that fostered relatedness and their feelings of connectedness. This contributed to a psychologically safe environment within which athletes could train and compete in sport, challenge themselves to achieve and explore "new" abilities and identity which enhanced their well-being.

Fostering a Sense of Autonomy and Competence Was Critical to Athletes' Motivation and Well-Being

The athletes identified their postinjury involvement in sport as a starting point for their discovery of new skills. They emphasized how their coach was able to structure training to convince them of their potential for accomplishment and shift their focus away from things they were no longer able to achieve. For example Athlete 5 described how she was encouraged to find

adapted solutions to challenging situations and the ensuing feelings of achievement and confidence demonstrated the deliberate influence of the coach:

The focus throughout was very much on the positive things I could do and attain, rather than things I couldn't and if there was something I was unable to do, specifically because of my injury, rather than simply being told it was just something I couldn't do, we would figure out an adapted solution.

The athletes identified that the behaviors of several of the coaches supported their sense of autonomy and motivation. For example, when athletes were part of the decision-making process, this, in turn, fostered their motivation. Athlete 5 commented, "but ultimately, if the athlete is not involved in some way and has some control and say over their own journey, I think it would be very easy to become disengaged and demotivated." Furthermore, Athlete 4 noted "I get to feel the sense of achievement because I chose to challenge myself, I chose to take that risk . . . so to be involved in that decision making in a bigger, more challenging environment is really helpful." Athletes also appreciated feeling that their coach was listening to them, valuing their experience, feelings, and perspectives. Athlete 1 commented, "I think it's a great environment, to feel safe to be curious and when my passion for the sport or my ideas are considered at some point on the journey."

The nature of the responses from these athletes with regard to autonomy are consistent with previous research in the study of motivation in sport (<u>Adie et al., 2008</u>; <u>Allen & Hodge</u>, <u>2006</u>; <u>Mageau & Vallerand, 2003</u>). Furthermore, integrating the athlete into the decision-making process could be considered as an example of a person or "other"-centered coaching approach, which has formed the basis for modern coaching pedagogy (<u>Chelladurai, 2007</u>; <u>Garner et al.</u>, <u>2022</u>; <u>Turnidge & Côté</u>, 2017).

Fostering athletes' feelings of competence was even more significant because of their loss of independence as a result of their illness or injury. Where coaches were able to design learning experiences which challenged the athletes at an appropriate level, the resultant feelings of competence improved athletes' confidence and self-belief. Athlete 8 commented,

He [the coach] understood that we all had different disabilities, different injuries and he'd tailor the session and incorporate all into it. If that meant someone going off for a half hour break, that's what happened. We would do different drills throughout the session, depending on what he thought would best for us as individuals. Athlete 5's experience was perhaps even more life transforming. She described how, as a result of working with the coach in the sport program, she was able to "come to terms" with the "new" version of herself. She was able to accept her limitations and yet knew she could overcome challenges. This gave her a sense of achievement which fostered her motivation and sense of well-being. She commented,

The sense of achievement I get from skiing helped re-ignite the drive and motivation to achieve other things. This sense of achievement also transferred into other areas of my life and helped me to realise that I could still do things, even if I needed to do them in a slightly different way.

Thus, positive effects on well-being were evidenced by the athletes finding a renewed energy and enthusiasm, not just for sport, but in other aspects of their life, and the sense of pride felt by their sporting achievements.

Not only did the athletes report coaches supporting their sense of competence, but, importantly, this was also a task-involved sense of competence focused on working collaboratively. For example, Athlete 1 talked about how the athletes in the program were encouraged to help each other to get better:

Instead of me learning a lesson and then watching my teammates stumble and figure it out for weeks, while I'm off doing something else, I want to share every single discovery I have and make my teammates better, cause the better they get today, the better I need to be tomorrow.

Need-Thwarting Coaching Behaviors Negatively Impacted Athletes' Well-Being

Despite evidence of coaching behaviors that supported need satisfaction and well-being, there was also evidence of coach-controlling behaviors which appeared to negatively impact athletes' motivation and well-being. Some athletes reported experiencing controlling coaching behaviors which sought to pressure or intimidate them into thinking, feeling, or behaving in a prescribed way. They also reported behaviors that suggested a lack of interest in their perspectives, or care for them, as well as behaviors that undermined athletes' confidence in their abilities.

Athlete 4 described how, after sensing the coach's frustration at her being unable to "keep up" with the group, she felt anxious and unable to sleep during the training camp. This, in turn, affected involvement in future training camps where that member of staff might be involved: "I was in their care really, at the end of the day, I mean I know I'm a grown adult, but um, but I was in their care, and I felt they let me down. But I was frustrated that they seemed to think that I was 'a problem child' and that, I really, I nearly walked away from the team because of that. That became overwhelmingly bad. Actually, it took months and months to rectify, and I just started isolating myself."

In another example, Athlete 2 commented,

I asked, "Can we have a conversation please? . . . I've got a few things I'd like to have a conversation about." And, as soon as I said "I don't feel like I'm getting the coaching I deserve," that was it, the chair was thrown back, he stood up, screaming in my face. And that was it, after that, I just kind of gave up.

Athletes also reported behaviors from coaches that disregarded athletes' opinions or limited opportunities for input from the athletes which frustrated their need for autonomy. Athlete 5 commented that "the sessions were almost dictatorial, in that there was no discussion or collaboration involved." This type of controlling approach to coaching has been discussed within literature specific to sport and within leadership studies more generally and has been linked with negative effects in regard to well-being such as reduction in vitality and burnout (Adie et al., 2012; Arnold et al., 2017; Bartholomew et al., 2011; Olafsen et al., 2017).

By not involving the athletes or not being open to their perspectives, there was evidence of coaches' behaviors also thwarting athletes' need for relatedness. Behaviors that appeared to deprive, and in some cases frustrate, athletes' sense of relatedness also negatively affected motivation, led to withdrawal, distress, and anxiety. One athlete even mentioned she felt like giving up on life completely and described how distressed she became after injury and resultant surgery resulted in immediate disconnection from the team. There was no rehabilitation support or counseling made available despite disclosure of severe deleterious effects on her mental health. This ultimately triggered retirement and transition into another sport: "When you're blocked, you just feel so useless and so worthless and it's a horrible position to be in I couldn't do anything and so it was just a complete nightmare, but the next year, I came away from [sport] completely" (Athlete 3).

Athlete 5 described how the coach's reaction to her mistakes affected her:

He would often yell at any mistakes—the yelling wasn't necessarily directed at me personally; it was just his way of expressing his frustration that it wasn't perfect, but it

just had the effect of making me more nervous and tense and ultimately making more mistakes.

These emotionally abusive encounters have been discussed by Stirling (2013), who interprets their origins to be both expressive (coaches' frustration) and instrumental (exertion of control upon athletes) with the potential to cause harm.

Discussion

The purpose of this study was to investigate the experiences of athletes in a competitive military sports recovery program and the extent to which coaches supported or frustrated their psychological needs in order to inform coaching practice. Using rich information gathered from semistructured interviews, athletes' perceptions of how memorable coaching interactions had affected their well-being were analyzed through the lens of BPNT. The findings contribute to our understanding of the experiences and psychological functioning of injured military personnel, the impact of a military sport recovery program, and the important role of the coach. As a result, our findings can inform those working with military parasport athletes about coaching practice that can contribute to enhanced recovery and well-being.

Drawing on SDT and BPNT (<u>Deci & Ryan, 1985</u>; <u>Ryan & Deci, 2000</u>) was useful to help us to better understand the impact of coaches on the athletes' experiences in a military sport recovery program. In doing so, we were able to explore not only the impact on athletes' wellbeing but also the mechanisms in action. That is, by considering the extent to which coaches' actions supported, deprived, or frustrated psychological needs, we are able to gain insight into how engagement in sport leads to positive or negative outcomes for injured military personnel.

Much of the research grounded in SDT, at least in sport, has focused on the autonomy supportive behaviors described by Mageau and Vallerand (2003). While the findings in our study suggest the importance of the need for autonomy, for these athletes, at least, feeling connected to and cared for by others (relatedness) and capable of engaging effectively with their environment (competence) to meet positive outcomes was as important, if not more important than autonomy.

Our findings demonstrate incidences where actions of coaches created an environment that fostered athletes' need for relatedness. This appeared to contribute to a psychologically safe environment within which athletes could train and compete in sport to a high level, challenge themselves to achieve and explore "new" abilities and identity which enhanced their well-being. This finding is consistent with propositions of SDT and BPNT (<u>Deci & Ryan, 1985; Ryan &</u>

Deci, 2000) and with findings in research in sport more generally (Gagné et al., 2003; Mageau & Vallerand, 2003; Reinboth & Duda, 2004). Positive effects of a relatedness-supportive environment manifest through a range of outcomes, such as increased morale, higher self-esteem, and reduced stress (Mallet, 2005; Occhino et al., 2014; Williams et al., 2013). Athletes in our study identified that coaches actively promoted and facilitated opportunities for athletes to develop camaraderie and help each other, and the creation of this type of environment may be akin to the military culture of teamwork and selfless commitment, a social culture which is sought after following transition to civilian life (Kintzle et al., 2018; Zogas, 2017). In addition, the opportunity to reconnect with other military personnel who have experienced somewhat similar emotions and challenges can provide a sense of connection and belonging (Ellison et al., 2016; Roberts et al., 2019). As such, the participants accounts support research that has suggested that gaining athletes' trust by providing and demonstrating care and a shared vision is more likely to contribute to positive sport experiences (Allen & Muir, 2020; Mallet, 2005).

Our findings support some aspects of the autonomy-supportive coaching behaviors described by Mageau and Vallerand (2003) and these seemed to have strong associations to the psychological needs of autonomy and competence. Most striking in support of autonomy and competence, however, was the tendency of some coaches to ensure their actions had relevance to athletes' life outside of sport, thus assisting in their transformational journey.

Bartholomew et al. (2010) contested that previous research lacked any distinction between lack of need satisfaction, and the active thwarting of needs, in relation to the impacts on health and well-being. In our study, athletes provide examples of coaching interactions that appeared to thwart psychological needs and threatened athletes' mental health and well-being, such as threat of deselection, acts of aggression, and pressurization. Our findings strengthen the argument that active thwarting of basic psychological needs as a result of a controlling environment shaped by the coaches' actions is consistent with feelings of ill-being in athletes. Similarities can be drawn from research highlighting the ill-effects of a "win-at-all-cost" approach (Cumming et al., 2007), and recurrence of this theme across some of the athletes in this study establishes its significance as a perceived threat to recovery. Moreover, athletes described how coaches use of controlling strategies such as intimidation and power exertion have had negative effects on their motivation and well-being, further strengthening findings from research such as that from Felton and Jowett (2013) and Olafsen et al. (2017). A prominent finding was a recurring mention that these athletes were on a journey of self-discovery. They recognized that the program they were engaged in had a part to play in their recovery following injury and were aware of its purpose to help facilitate this. Many of the positive accounts were of interactions within these programs which had led to improved feelings of self-worth, confidence, and the social benefits of reconnection with others. Examples of literature which has researched the positive psychological and social benefits of sport are readily available (Downs & Ashton, 2011; Malm et al., 2019; Wankel & Berger, 1990); the findings in this study lend further support to these claims and extend them to military sport recovery programs.

An important finding from our study, however, is that sport and sport recovery programs by themselves are neither inherently positive nor negative for injured military personnel. Instead, how sport and the program are delivered and the psychosocial environment created by the actions of others, particularly coaches, is critical. Where coaches created a need-supportive environment, the athletes' experiences were largely positive and led to enhanced sense of identity and well-being. However, where coaches' actions thwarted the satisfaction of needs through need depriving or frustration, the outcomes for athletes were less positive and led to loss of confidence, stress, anxiety, isolation, and ill-being. This potential for sport to have a deleterious effect on injured military participants has not received much attention, though it has been noted in wider sport research (Arnold et al., 2017; Hodge et al., 2008; Stenling et al., 2017).

The negative impact of injury and illness as a result of military service and the challenges faced when transitioning into civilian life is well documented (e.g., <u>Kintzle et al., 2018</u>; <u>Melcer et al., 2010</u>; <u>Walker, 2010</u>; <u>Zogas, 2017</u>), and although not the specific focus of this study, our findings add to this body of literature demonstrating the impact of physical and psychological trauma on participants' identity and well-being. Our findings also contribute to the growing interest in the transformational power of sport as a vehicle for positive rehabilitation and recovery (e.g., <u>Caddick & Smith, 2017</u>; <u>Enos, 2015</u>; <u>Peacock et al., 2019</u>; <u>Sutton et al., 2023</u>), and somewhat distinctively, highlight the important role coaches play, with athletes making reference to positive and negative experiences which had been significant to them and had impacted on their recovery process. Consistent with SDT and BPNT (<u>Deci & Ryan, 1985</u>; <u>Ryan & Deci, 2000</u>), we were able to demonstrate that through the psychosocial environment that the coaches facilitated through their interactions, they were able to foster satisfaction of all three

basic psychological needs which, in turn, appeared to foster adaptive motivation and well-being. However, our findings also indicate that coaches' actions can thwart athletes' psychological needs leading to ill-being, and there were several examples of controlling interactions which served to create a more toxic and harmful environment. Therefore, the importance of coaches engaging in continuous professional development to support them in avoiding negative environments cannot be overemphasized.

Conclusions and Practical Implications

These findings make a valuable contribution to our understanding of the experiences, both positive and negative, that a sports recovery program has imparted upon a small cohort of wounded veterans. They provide us with insights into how the social psychological environment created by the coach can directly impact veterans' psychological needs, well-being, and recovery process. Therefore, practitioners such as coaches working with wounded, injured, and sick veterans would benefit from engaging in continuous professional development to support their understanding and development of motivationally adaptive environments (e.g., <u>Ahlberg et al., 2008; Mallet, 2005; Turnidge & Côté, 2017</u>), and this study adds to this important topic. In particular, knowledge of how controlling behaviors have the potential to cause harm will be useful for practitioners in this context, to avoid potentially toxic environments particularly where the philosophy of such programs has recovery as its primary purpose.

In this study, we also sought to examine this context through the lens of BPNT. Overall, our findings demonstrate support for the propositions of BPNT (Deci & Ryan, 1985; Ryan & Deci, 2000) in that the athletes recalled coaching behaviors which they said supported their basic psychological needs and fostered feelings of well-being. This in turn supported their wider rehabilitation process. The athletes also identified coaching behaviors which frustrated their psychological needs and contributed to feelings of ill-being. These in turn hinder their recovery. Our findings extend previous research grounded in BPNT by investigating the coach's role in psychological need satisfaction within a military sport recovery program and with para-athletes competing in high-level sport. Furthermore, contrary to research that has emphasized benefits of autonomy-supportive coaching behaviors, our findings demonstrate that for these athletes, supporting their needs for relatedness and competence was at least as important, if not more important, than supporting autonomy.

It could be argued that this context has perhaps provided an amplified version of psychological outcomes due to its philosophy of recovery through engagement in sport, or that these athletes have learned through the course of their recovery journey that open dialogue about mental health and well-being is essential to progress, but, as a result, rich information has been gathered to allow discussion and interpretation. While all coaches are in the privileged position to influence the thoughts and feelings of their athletes, they remain instrumental to supporting and recognizing a decline in well-being, as a result of sport-specific or general life factors. Coaches in this context must look to develop strategies to provide them with a safe and supportive social environment, being careful that their interactions engender empowerment rather than control.

Limitations and Future Research

These findings reflect the experiences of athletes engaged in one military sports recovery program and their involvement in both national and military sports charity level. It is not our intention to generalize our findings to all parasport athletes and coaches, instead consistent with our relativist perspective the unique, context-specific insights provided by the individual experiences and subjective interpretations of the athletes are valued. However, the findings may resonate with others involved in parasport (e.g., coaches and athletes), and, as such, provide "naturalistic" tentative generalizations (Stake, 2013). When considering this point, we encourage readers to assess whether our methods generated sufficient richness to enable transferability thereby ensuring that the findings can be meaningfully applied to similar contexts and contribute to the development of new theories or practices.

Data were gathered through a single one-off interview with each athlete. While our intention was to obtain detailed and comprehensive insights, it is important to note that this singular perspective may not fully capture the complexities and multifaceted nature of coaching practices in military sport recovery programs. Athletes' perceptions could be influenced by personal experiences, emotions, or the specific context of their recovery journey.

To address these limitations, future research could benefit from incorporating triangulation of perspectives. This means gathering data not only from athletes but also from their coaches. Including coaches perspectives, philosophies, and observations of coaching behaviors could provide a more comprehensive and nuanced picture of coaching practices.

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