

Gratitude in Sport: Positive Psychology for Athletes and Implications for Mental Health, Well-Being, and Performance



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Abstract This chapter focuses on the potential benefits of gratitude cultivation and expression in the sport context, as it pertains to the positive mental health and well-being of individual athletes and teams. Positive psychology interventions (PPIs) that aim to cultivate grateful thoughts, feelings, and actions have demonstrated positive effects on mental and physical health among youth, college-age, and adult populations. Some of these benefits include increased life satisfaction, social connectedness, positive affect, resilience, altruism, better quality of sleep, and reduced psychological distress. Specifically, in the athletic population, recent research has shown that athletes who have higher levels of gratitude also report greater social support, life and sport satisfaction, team cohesion, and lower levels of burnout. Framed within the context of Fredrickson's Broaden-and-Build Theory of Positive Emotions, the author will discuss how gratitude can broaden athletes' perspectives by noticing the good, and build their resources by increasing the perception of available support. The literature on gratitude PPIs to date will be discussed, considering specific implications for athletic populations. Potential applications for sport psychologists and other practitioners working in a performance context will be provided. Finally, the author will provide caveats and considerations of implementing gratitude PPIs among sport and performance populations, including limitations of the current body of literature, contextual factors, and future directions. Overall, this chapter emphasizes that the utilization of positive psychology in sport may be advantageous for athletes, coaches, and teams, and calls for further empirical study and applied focus in this area.

Keywords Sport psychology · Athlete · Mental health · Well-being · Performance

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L. E. Van Zyl and S. Rothmann Sr. (eds.), *Theoretical Approaches to Multi-Cultural Positive Psychological Interventions*,
https://doi.org/10.1007/978-3-030-20583-6_15

1 Introduction

Sport psychology, which has roots in the fields of psychology and sport science, is similar to positive psychology in that it seeks to understand the mechanisms underlying optimal human performance, specifically in the kinesthetic realm. The broader domain of performance psychology may additionally include musical performance, military performance, or surgical performance, to name a few; however, for the purposes of this chapter, the integration of positive psychology specifically as it relates to the realm of sport domain will be discussed. Just as sport psychology is concerned with studying what aspects lead to optimal mental and physical performance, the science of positive psychology seeks to investigate what factors contribute to optimal human functioning, societal flourishing, and subjective, psychological, and social well-being. Since its origin, positive psychology has been primarily concerned with studying human flourishing in order to move toward a deeper understanding of human potential and well-being (Linley, Joseph, Harrington, & Wood, 2006). This is in contrast to the longstanding psychopathology model which has focused much energy on identifying, understanding, and treating disorders of the human mind and symptom amelioration (Waterman, 2013).

The field of sport psychology has focused on understanding the characteristics needed for optimal performance in sport, as well as enhancement of athlete mental health and well-being (Aoyagi, Portenga, Poczwardowski, Cohen, & Statler, 2012). Since positive psychology has focused on understanding psychological functioning at its best (i.e., flourishing; Keyes, 2002), it shares a common interest with sport psychology. Both domains can be used prescriptively (i.e., to address a problem), preventatively (i.e., to prevent a problem), as well as for enhancement (i.e., to make what is already good, better). For example, a person may seek a sport psychologist to promote multicultural awareness among team members (preventative), to address performance anxiety (treatment), or to achieve optimal attentional focus during a game (enhancement). Similarly, positive psychology can be applied in all three conditions as well, and offers a unique perspective to applied sport psychology given its roots in the optimization of human strengths. Interventions associated with positive psychology concepts such as gratitude, optimism, and hope have been related to positive outcomes in a variety of clinical circumstances (Sin & Lyubomirsky, 2009). Recently, sport psychology researchers and professionals have discovered that borrowing concepts and techniques from the positive psychology literature may offer valuable insight and intervention strategies for addressing sport and performance concerns.

Similar to traditional psychopathology, sport often preaches an improvement mentality (i.e., how to fix what is going wrong). Directing attention to areas of improvement is an integral part of sport, whether performing or coaching. Much can be gained from addressing weaknesses or problem areas; however, spending time identifying strengths and successful experiences can be just as informative and effective in the performance enhancement process (Wagstaff & Leach, 2015). Wagstaff and Leach (2015) advocated for a strengths-based model among performers and acknowl-

edged that while focusing on minimizing, correcting, or eliminating weakness can be conducive to high performance, the development of strengths is crucial to the improvement process. Researchers advised that “positive psychological phenomena need not be emphasized at the cost of exploring pathology” (p. 79), arguing for an integration and alignment of both strengths- and pathological-based research in performance arenas. Sport psychology practitioners have long encouraged a balanced perspective; that is, for athletes and coaches to not only identify what can be better, but to also examine what is going well in order to repeat successful behaviors in the future. In this way, merging two fields both focused on optimizing human potential (i.e., positive psychology and sport psychology) seems to be a natural and appropriate fit.

Within the field of positive psychology, the concept of gratitude has most notably drawn attention in the past two decades from researchers and practitioners alike. Integrating the fields of positive psychology and sport psychology, this chapter focuses on the relevance of gratitude to the sport context, specifically its relationship to athlete mental health, well-being, and performance. To this aim, an overview of the literature on positive emotions, gratitude, and gratitude interventions will be provided to present a theoretically-guided rationale for the relevance of gratitude in sport. Next, the empirical literature on athlete gratitude will be reviewed to date, including the potential applicability of gratitude interventions in sport. Practical implications for the unique athlete population will be discussed, with particular attention to athlete mental health, well-being, and performance. The chapter concludes with guidelines for athletes, coaches, parents, and sport psychology practitioners, implications for future research, and a conclusion of key points.

2 Review of Literature

In a meta-analysis of nearly 300 empirical studies on positive affect, researchers found that positivity is not only related to success in life, but also predicts it (Lyubomirsky, King, & Diener, 2005). Therefore, it is not enough to say that successful people happen to experience more positive emotions, but rather that experiencing positive emotions can, in fact, lead to greater success. Fredrickson (2001) reported that positive emotions can have an “undoing” effect on negative emotions, even to the point of improving physical health as well as psychological well-being. Researchers found that when people experience positive emotion immediately following a high-activation negative emotion (eliciting a physiological response), the cardiovascular system tends to recover more quickly (Fredrickson & Levenson, 1998; Fredrickson, Mancuso, Branigan, & Tugade, 2000). Athletes may experience an amalgam of positive and negative thoughts and emotions within the context of performance. Therefore, combatting negative self-talk with more positive, productive thoughts may have an enhancing effect on performance and general athlete well-being.

According to Barbara Fredrickson, a prominent U.S. researcher, author, and professor of positive psychology, experiencing positive emotions affects our cognition

in two major ways: (1) positive emotions broaden our conceptualization of a given situation, expanding our ideas and potential actions; and (2) build our network of resources by encouraging the development and utilization of strengths, abilities, and reserves (Fredrickson, 2001, 2004). The Broaden and Build Theory purports that positive emotions facilitate problem-solving through enhanced creativity, since we tend to view a greater range of possibilities (e.g., solutions) when experiencing positive emotions as compared to negative emotions. In contrast, negative emotions tend to narrow our focus, which has served an adaptive evolutionary function to protect us from potential threat or harm. For example, experiencing fear or anxiety after seeing a bear on a hike would narrow attentional focus, allowing one to concentrate on the best possible escape route. Negative emotions serve a purpose; however, in modern society, negative emotion may impede our ability to consider a range of possibilities and think creatively during problem-solving and decision-making processes, especially in situations which are not dangerous or life-threatening. Wagstaff and Leach (2015) proposed that cultivating positive emotions during stressful times may actually enhance an individual's ability to cope with adversity, and foster facilitative cognitive, emotional, and behavioural responses in the face of challenge. Adversity is inevitable in competitive sport; therefore, finding ways to cultivate positive emotion in sport may be particularly conducive to optimal athletic performance, as well as athlete mental health and well-being.

In addition to broadening one's mindset, positive emotions can help build and utilize valuable resources to achieve positive outcomes (Fredrickson, 2001). For example, experiencing the emotion of hope during times of trial may inspire one to draw upon one's strengths during a difficult situation (Wagstaff & Leach, 2015). Consider the challenge of acquiring a new skill in sport; maintaining a positive attitude or bringing humor into the situation may increase "stick-with-it-ness" throughout the challenging process (Fletcher & Sarkar, 2012). Additionally, finding ways to cultivate positivity amongst athletes on a team may produce benefits for group dynamics, team cohesion, and interpersonal functioning, since PPIs have been associated with better relationships and higher levels of interpersonal connectedness (Fincham, 2000; Fredrickson, 2009; Wood, Froh, & Geraghty, 2010) and enhanced subjective and psychological well-being (Bolier et al., 2013). In addition to potential psychological and social benefits, PPIs may hold potential implications for performance as well. In a meta-analysis of sport-specific interventions, researchers reported that psychological and psychosocial interventions have been shown to enhance sport performance, with larger effects for those which included an active social component (Brown & Fletcher, 2017).

2.1 *Gratitude*

Of the number of positive psychology topics examined in recent years (e.g., resilience, grit, mindfulness), gratitude remains relatively understudied in the context of sport. Trait gratitude can be conceptualized as a "life orientation towards noticing and

appreciating the positive in life,” rather than merely feeling appreciation toward others (Wood et al., 2010, p. 3). While this defines gratitude as a disposition, gratitude can also be a state of feeling, or an act outwardly directed toward another (e.g., writing a gratitude letter, saying ‘thank you’) or expressed privately (e.g., gratitude journaling). Other researchers define gratitude as the “sense of thankfulness that arises in response to receiving any kind of personal benefit (be it material or nonmaterial) as a result of any transactional means (be it a personal encounter with another person, with nature, with an object, or even with ideas)” (Furlong, You, Renshaw, O’Malley, & Rebelez, 2013, p. 755). There is a general consensus in the positive psychology literature that gratitude is a good indicator of subjective well-being (i.e., happiness) given its numerous associations with other positive social, physical, and mental health indicators such as optimism, life satisfaction, social connectedness, hope, forgiveness, prosocial behavior, sleep quality, and positive affect; in addition, gratitude has been negatively correlated with measures of personal and social ill-being such as depression, anxiety, negative affect, materialism, aggression, burnout, envy, and psychological distress (Algoe, Gable, & Maisel, 2010; DeWall, Lambert, Pole, Kashdan, & Finchman, 2012; Froh, Sefick, & Emmons, 2008; Froh, Yurkewicz, & Kashdan, 2009; Gabana, Steinfeldt, Wong, & Chung, 2017; Lanham, Rye, Rimsky, & Weill, 2012; McCullough, Emmons, & Tsang, 2002; Wood et al., 2010).

More recently, gratitude has been connected to resilience, suggesting that gratitude may serve as a protective factor and/or coping mechanism in the face of adversity. In a study surveying U.S. college students 4-months after a campus shooting, researchers found resilience to be a buffer (i.e., mediator) between trauma exposure and post-traumatic stress. Similarly, gratitude positively mediated the relationship between posttraumatic stress and posttraumatic growth, in that participants who reported higher levels of trait gratitude indicated more positive growth following the trauma (Vieselmeyer, Holguin, & Mezulis, 2017). In this way, resilience and gratitude may work hand in hand, with the former preventing negative outcomes and the latter promoting positive outcomes after a traumatic event (Vieselmeyer et al., 2017). In a related study among undergraduate students in India, trait gratitude was found to be a significant predictor of resilience (Gupta & Kumar, 2015). Results of a multiple regression analysis revealed that predictors of gratitude, acceptance, and forgiveness accounted for 66% of the variance in resilience scores, with gratitude emerging as the largest predictor of resilience among the three. Given that resilience is recognized as a highly valued and desired trait among athletes both on and off the field (Wagstaff & Leach, 2015), further empirical investigation of the relationship between gratitude and resilience in sport is warranted. Particularly, gratitude intervention researchers should consider measuring resilience as an outcome variable in future studies, both in general and sport-specific populations. In the next section, a summary of gratitude intervention research will be provided, with consideration of implications for sport.

2.2 *Gratitude Interventions*

In some of the earliest research on gratitude interventions, Emmons (1999) found that undergraduate students who wrote down five things they felt grateful for in the past week were significantly more optimistic and felt better about their lives in general, compared to students who wrote down either five general events or five stressors that occurred during the week. Additionally, the gratitude group had lesser somatic complaints, spent more time exercising, and reported making more progress toward goals than the other two groups (Emmons, 1999). PPIs aimed at cultivating gratitude have demonstrated a number of intrapersonal and interpersonal benefits, specifically increased subjective well-being, lower depression, positive emotions, and stronger interconnectedness with others (Seligman, Steen, Park, & Peterson, 2005; Wood et al., 2010). In a review of cross-sectional, longitudinal, and experimental studies focused on gratitude, Wood et al. (2010) reported a number of psychological and physical benefits correlated with gratitude; specifically, trait gratitude was associated with better health outcomes (e.g., better quality of sleep), greater life satisfaction, lower risk of mental illness, and better quality relationships. Additionally, numerous studies have reported associations between gratitude and a range of variables such as enhanced enthusiasm, alertness, energy, goal attainment, determination, emotional closure, better psychotherapy outcomes, positive affect, perceived social support, and altruism (Wood et al., 2010).

While interventions aimed at increasing gratitude (e.g., gratitude lists, grateful contemplation, expressing gratitude behaviorally) have been linked to enhanced well-being, it is unclear how their effectiveness compares to a control group or other types of interventions (Wood et al., 2010). In a meta-analysis of gratitude interventions, Davis et al. (2016) cautioned researchers from overemphasizing the potential effects of gratitude on positive outcomes, as their analysis found gratitude interventions to be “marginally better” than a matched-activity comparison group (p. 24) for improving psychological well-being. Furthermore, Davis et al. found that “gratitude interventions did not outperform psychologically active conditions” (p. 26). However, Dickens (2017) pointed out that a major limitation of Davis et al. (2016) was that researchers grouped positive, negative, and neutral conditions into one comparison group, which distorted results. Dickens claimed that “valence of the comparison group is likely to influence the magnitude of the effect sizes” (p. 195); therefore, she conducted a meta-analysis to compare gratitude interventions with neutral, negative, and positive comparison groups.

Using 56 meta-analyses, Dickens (2017) included 38 studies with 282 effect sizes, finding mixed results for the effectiveness of gratitude interventions on various markers of well-being. Specifically, Dickens reported that when post-intervention scores were compared to a neutral condition group, gratitude interventions had notably higher effects on the variables of grateful mood, life satisfaction, positive affect, happiness, optimism, quality of relationships, dispositional gratitude, and overall well-being; the gratitude intervention group also demonstrated lower levels of depression than neutral conditions. Contrary to previous reports, however, Dickens (2017) did

not find gratitude interventions to be more impactful on physical health, exercise, or stress. She also examined these effects at a delayed follow-up time point, and found that some positive effects of the gratitude intervention group (i.e., higher well-being and happiness, lower depression) were sustained longer than the neutral comparison group.

When compared to a negative intervention group at post-intervention, gratitude interventions demonstrated similar effects for both positive and negative variables above and beyond negative interventions, with small differences in physical health, prosocial behavior, and sleep in favor of the gratitude intervention condition (Dickens, 2017). Grateful mood was the only positive outcome that demonstrated a notable difference at the delayed follow-up. When gratitude interventions were compared to a positive intervention group, the gratitude intervention group showed a substantial difference in enhanced well-being, but differences on outcomes of other variables were not found (i.e., quality of relationships, life satisfaction, happiness, grateful mood, positive and negative affect, depression, optimism, stress, self-esteem, physical health, and sleep). At a delayed follow-up, a small difference in well-being was observed. Therefore, Dickens (2017) concluded that gratitude interventions do not seem to demonstrate more effectiveness than other types of positive interventions, such as strengths-based activities.

With these caveats and considerations in mind, it is still apparent that utilizing gratitude PPIs within a sport context might be advantageous in providing athletes with strategies and coping skills to target desired outcomes relevant to sport performance. While many empirical studies have consisted of one-time interventions such as making a gratitude list (e.g., Gabana, Steinfeldt, Wong, Chung, & Svetina, 2018), gratitude journaling (e.g., Lambert, Fincham, & Stillman 2012), writing gratitude letters (e.g., Wong et al., 2018), or writing down “three good things” (e.g., Seligman et al., 2005), researchers have suggested that multi-session gratitude programmes may be more likely to have lasting effects due to increased dosage (Davis et al., 2016). For example, Rash, Matsuba, and Prkachin (2011) found that repeated gratitude contemplation over the course of a 4-week intervention programme significantly increased self-esteem and life satisfaction in comparison to a control group. In this study, participants in the gratitude group were asked to think about what they were grateful for (e.g., people, items, events) and “to experience and maintain the sincere heart-felt feelings of gratitude associated with that thought” (p. 358). After this reflection, participants were asked to journal about their experiences of gratitude for at least 5 min, twice a week for 4 weeks (Rash et al., 2011). Multi-session interventions involving repeated gratitude activities may be more effective at promoting a grateful disposition because of their potential to produce a habit through repeated practice.

State gratitude may serve as a buffer for stress because it has been found to moderate the relationship between stress and variables such as self-esteem, worry, adjustment, and negative affect (Nezlek, Krejtz, Rusanowska, & Holas, 2019). In this study, Nezlek et al. had 131 psychologically healthy adults report their daily events, how grateful they felt that day, and daily well-being over the course of 2 weeks. Researchers found that on days when people reported higher levels of felt gratitude,

the relationship between daily stressful events and self-esteem and depressogenic adjustment were weaker. This was also the case for correlations between stress and worry and negative affect. Furthermore, the strength of the relationships between gratitude and worry, negative affect, and depressogenic adjustment were stronger on days when participants reported less positive events. This means that higher levels of daily (state) gratitude can have a positive impact on the way people experience negative events. Nezlek et al. purported that feelings of gratitude can compensate for having a less positive day, congruent with previous findings (e.g., Lambert et al., 2012).

Gratitude has also been studied in the youth population, specifically. A longitudinal study on U.S. high school students found that higher levels of gratitude in adolescents were associated with better adjustment, social relationships, and psychological well-being (Bono, Froh, & Emmons, 2012). Researchers reported that gratitude predicted higher levels of positive emotions, happiness, and life satisfaction at the end of high school. Specifically, students who developed more gratitude throughout high school, based on self-report data, demonstrated better behaviour in school (e.g., not cheating), including behaviour toward peers (e.g., not teasing; Bono et al., 2012). Other studies have linked gratitude to higher levels of optimism and life satisfaction, and lesser physical complaints and negative affect in young adults (Emmons & McCullough, 2003). Gratitude interventions have also produced positive effects in elementary school students, with a five-session gratitude curriculum resulting in higher levels of positive affect, grateful thinking, and behavioural gratitude expression. Researchers emphasized that “education that facilitates cognitive appraisals that produce gratitude should be encouraged as early in life as possible so that young persons have a head start toward becoming mature receivers and providers of benevolent actions” (Froh et al., 2014, p. 148). Since trait gratitude can be increased with intentional practice over time, developing a grateful mindset at an early age may pay dividends for coping with adversity later in life.

Much of the data on correlates of gratitude and the effects of gratitude interventions have been collected on college students in the U.S. Recently, researchers have even investigated the neural correlates of gratitude, providing evidence that both the experience and expression of gratitude ignite particular parts of the brain associated with moral cognition and positive emotion, such as the anterior cingulate cortex and the medial prefrontal cortex (Fox, Kaplan, Damasio, & Damasio, 2015; Kini, Wong, McInnis, Gabana, & Brown, 2016). Kini et al. additionally found that participants in a gratitude letter writing condition demonstrated increased behavioural expressions of gratitude (operationalized by a “Pay it Forward” activity measuring the amount of money participants decided to pass on to a third party, from what they received from a benefactor) and significantly greater neural modulation by gratitude in comparison to a control group. This means that when participants were making the decision about how much money to give, more neural activity was observed in the region of the brain correlated with self-reported gratitude.

Gratitude interventions have also been found to result in improved mental health outcomes for college students. Effects on both measures of well-being and ill-being have been indicated, such as greater optimism, school connectedness, happiness, life

satisfaction; and lesser stress, depressive symptoms, and negative affect, respectively (Renshaw & Hindman, 2017; Renshaw & Rock, 2018). Gratitude has also been linked to lower levels of depression and anxiety among the general adult population (Petrocchi & Couyoumdjian, 2016). Interestingly, researchers suggested that gratitude may be a protective factor against psychopathology because of its ability to foster a less critical and more compassionate attitude, both toward oneself and others (Petrocchi & Couyoumdjian, 2016). This aligns with mindfulness and acceptance-based therapeutic approaches which have demonstrated intrapersonal and interpersonal benefits on mental health, well-being, and performance in both general and sport-specific domains (e.g., Baltzell & Akhtar, 2014; Gardner & Moore, 2012; Neff, 2003; Noetel, Ciarrochi, Van Zanden, & Lonsdale, 2017). Of particular note, a recent multi-session gratitude intervention entitled the “Gratitude Group Program” was tested among college students who attended a series of five 90-min sessions, conducted once per week for 5 weeks (Wong, McKean Blackwell, Goodrich Mitts, Gabana, & Li, 2017). This study was the first of its kind to focus on cultivating gratitude as its core goal, within a group therapeutic model. Sessions included didactic, discussion-based, interpersonal, and experiential components, in addition to weekly homework assignments to encourage gratitude practice between sessions (e.g., writing down three good things, five times per week). Session topics included micro and macro gratitude, interpersonal gratitude, gratitude savouring, and redemptive gratitude. Results revealed that after participating in the Gratitude Group Program, participants exhibited significant improvements in state and trait gratitude, life satisfaction, and meaning in life, and decreased levels of psychological distress post-intervention (Wong, McKean Blackwell et al., 2017). Similar multi-session programs may be designed and tailored to the athlete population, by making content and practice relevant to the sport setting.

In addition to the general population, gratitude interventions have also demonstrated improved outcomes for psychotherapy clients specifically. Wong et al. (2018) found that individuals enrolled in psychotherapy for mental health issues who also participated in a gratitude letter writing intervention reported significantly better mental health outcomes than those in both control and expressive writing conditions, while the latter two conditions did not differ significantly. One of the reasons gratitude writing may produce positive effects on mental health for a range of populations (e.g., youth, college students, adults, psychotherapy clients) may be attributed to cognitive reappraisal. Furthermore, in examining gratitude among prison inmates, Wong, Gabana, Zounlome, Goodrich Mitts, and Lucas (2017) noted that positive benefit appraisals (i.e., one’s attributions about the help received from others; Wood, Joseph, & Maltby, 2008) and positive reframing (i.e., re-perceiving a negative experience in a more positive way; Lambert et al., 2012) played a role in the association between higher state gratitude and lower levels of psychological distress. Intentionally paying attention to the good things in life, or what is going well, can amplify positive emotions and experiences even further, thereby maximizing their effect on mental health and well-being. Furthermore, cultivating and expressing gratitude may produce positive effects because through its generation, whether as a thought, emotion, or behaviour, it can help a person reframe a negative experience in a positive

light (Lambert et al., 2012). In this way, gratitude may be a valuable preventative, treatment, or optimization tool.

Gratitude has a tendency to strengthen existing interpersonal relationships by reinforcing social bonds and socially inclusive behaviours (Bartlett, Condon, Cruz, Baumann, & Desteno, 2012). For this reason, social implications abound for the team setting, particularly in the sport context. In a randomized controlled trial, O'Connell, O'Shea, and Gallagher (2017a) found that gratitude journaling predicted higher life satisfaction and improvements in friendship when compared to an active journaling control group. Intentionally journaling from a grateful perspective about daily events exhibited more positive outcomes due to the mediating effect of increased levels of dispositional gratitude on perceived friendship quality (O'Connell et al., 2017a). Furthermore, cultivating interpersonal gratitude (i.e., directed toward others) versus self-focused gratitude (i.e., no social interaction) may heighten relationship satisfaction even more (O'Connell, O'Shea, & Gallagher, 2016). In addition to gratitude writing interventions, activities which encourage expression of felt gratitude toward others are especially recommended for deriving positive social and interpersonal outcomes (O'Connell, O'Shea, & Gallagher, 2017b). Gratitude has a tendency to promote and encourage prosocial behaviour and foster prosocial personality characteristics such as humility, reciprocity, forgiveness, interpersonal connectedness, and motivation toward self-improvement (Algoe, 2012; Armenta, Fritz, & Lyubomirsky, 2017; Toussaint & Friedman, 2009).

These results highlight the wide range of benefits of expressing gratitude, not only psychologically, but physically, neurologically, and behaviourally as well. While gratitude is most often understood as a personality disposition, this cognitive, affective, and behavioural trait is thought to be relatively malleable (Renshaw & Rock, 2018), especially with practice over time. Individuals, such as athletes, may benefit from gratitude interventions because their primary goal is to intentionally cultivate gratitude. Viewing gratitude as a mental skill or life skill means that it can be effectively practiced and grown over time, fostering a more grateful mindset which may be advantageous to a range of populations including youth, college students, and adults alike. Since gratitude is a virtue with a strong social and interpersonal focus (Emmons & Mishra, 2011), interventions geared toward cultivating and expressing gratitude may be well-suited for athletic populations, since psychosocial interventions have been shown to be particularly effective in enhancing sport performance (Brown & Fletcher, 2017). In the next section, an overview of the empirical research on athlete gratitude is provided, followed by a discussion of gratitude interventions in the context of sport.

2.3 Athlete Gratitude

To the author's knowledge, the entirety of empirical research to date specifically geared toward studying the concept of gratitude in athletes has been conducted in the past decade. The first known study to examine athlete gratitude was conducted

by Chen and Kee (2008) in Taiwan. Researchers found that trait gratitude, as measured by the Gratitude Questionnaire—6 (GQ-6; McCullough et al., 2002), predicted higher life and team satisfaction and lower levels of athlete burnout. Sport-domain gratitude, measured using a sport-specific adaptation of the GQ-6, was strongly correlated with team satisfaction (Chen & Kee, 2008). This seminal study demonstrated the value in studying the concept of gratitude in athletes, and suggested that examining domain-specific gratitude may lend further insight into its relevance to the sport and performance setting. Researchers have continued to demonstrate that both general trait gratitude and sport-domain gratitude can impact athletes' experience in life and sport. Sport-domain gratitude has even been shown to significantly predict levels of athlete burnout and team satisfaction above and beyond general gratitude (Chen & Chang, 2017); both general and sport-domain gratitude were linked to life satisfaction, vitality, and self-esteem in both current and former athletes in the U.S. and Taiwan.

A series of studies, mostly sampling Taiwanese adolescent athletes, continued to illuminate the relationship between trait gratitude and a number of sport-related variables. In a sample of 291 Taiwanese high school athletes, gratitude was significantly correlated with team satisfaction, support from coaches, and support from teammates (Chen, 2013). Furthermore, gratitude was shown to predict both coach and team support, which in turn, resulted in higher levels of team satisfaction. It was noted that coach and teammate support were distinct from one another, suggesting that both the coach-athlete relationship, and one's relationship with teammates, comprise two unique avenues through which gratitude can affect team satisfaction. This supported Fredrickson's Broaden and Build Theory of positive emotions, in that when athletes were more grateful, they perceived more support available to them, thus broadening their perspective and building upon social resources.

Chen (2013) was the first to make the case that the coach may play a major role in how athletes experience and practice gratitude within the team context. Coaches have been shown to have significant influence over shaping their athletes' cognitions, emotions, and behaviours, given their frequent interactions on a daily basis (Jowett & Ntoumanis, 2004). Further empirical inquiries found additional connections regarding the instrumental role of the coach in how gratitude functions for athletes. Chen and Wu (2014) found that higher trait gratitude resulted in greater levels of self-esteem, only when the athlete had higher trust in their coach. In a similar fashion, gratitude negatively predicted experiential avoidance (i.e., an attempt to avoid or escape unpleasant or uncomfortable thoughts, emotions, sensations, or experiences) when perceived coach autonomy support is high, but not when coach support was low (Chen & Wu, 2016). Autonomy support is defined as "the attitude and practices of a person ... that facilitate the target individual's self-organization and self-regulation of actions and experience" (Ryan & Deci, 2008, p. 188). While this interaction only explained a small percentage of the variance, it acknowledges the breadth of factors related to gratitude within the performance setting.

Researchers have done well to not only focus on the main effects of gratitude on sport-related variables, but also examine the mediators and moderators of athlete gratitude. Other sport-related variables that have been examined in the extant

gratitude literature include athlete burnout, team cohesion, sport satisfaction, and perceived social support. Higher levels of athlete gratitude have been significantly correlated with lower levels of athlete burnout, albeit these associations were generally weak (Chen & Chang, 2014; Gabana et al., 2017). Chen and Chang (2014) noted that gratitude as a personality trait does not seem to directly influence athlete burnout, but that athletes who report more burnout may be less grateful. This is likely due to the three core characteristics of athlete burnout: (1) reduced sense of accomplishment, (2) devaluation of the sport experience, and (3) emotional and physical exhaustion (Raedeke & Smith, 2001). Based on a sample of 293 National Collegiate Athletic Association (NCAA) athletes in the U.S., Gabana et al. (2017) found that athletes with higher trait gratitude scored lower on the devaluation of sport experience dimension of burnout. This suggests that having a more grateful disposition may preserve an athlete's value for their sport, which holds implication for collegiate sport retention rates and an athlete's qualitative experience in sport. Specifically, boosting esteem support (e.g., self-esteem, sense of competence) may increase the likelihood that gratitude will have a positive impact on how much an athlete values their sport experience. Higher levels of gratitude, coupled with more informational and esteem support, also appears to have a preventative effect on the reduced sense of accomplishment component of athlete burnout (Gabana et al., 2017).

Furthermore, in this study, perceived available social support in sport was identified as a significant mediator in the relationship between an athlete's gratitude, sport satisfaction, and burnout. The higher an athlete scored on trait gratitude, the more they tended to perceive support available to them; and in turn, they were more likely to be satisfied with their sport and less likely to exhibit signs of burnout (Gabana et al., 2017). By itself, athlete gratitude was most significantly related to emotional support; however, results suggested that tangible support (i.e., concrete instrumental assistance) was especially relevant to the impact of gratitude on sport satisfaction. While one may question whether athletes who had more social support available to them, in turn felt more grateful, researchers tested this reverse mediation model and it was not found to be significant. This means that trait gratitude can actually influence one's perceptions of social support, which has positive implications for athlete well-being.

Team cohesion is closely related to social support, in that it has been identified as a valuable component of successful sport performance. Chen, Kee, and Chen (2015) found that the social cohesion explained the positive relationship between trait gratitude and life satisfaction among 300 Taiwanese high school athletes. In another study published the same year, gratitude was found to predict life satisfaction among collegiate athletes in Taiwan, but this association was weaker when athletes exhibited high ambivalence over emotional expression (Chen, Wu, & Chen, 2015). This suggests that athletes who do not value emotional expression may be less impacted by gratitude. However, even in college students who had a high ambivalence toward emotional expression, gratitude was significantly related to lower levels of loneliness and depression (Chen, Chen, & Tsai, 2012). It is possible that gratitude may work more effectively to ameliorate negative symptoms (e.g., stress) than promoting positive outcomes when ambivalence over emotional expression is high (Chen et al.,

2012). In any case, it is worth exploring for whom gratitude interventions may be most effective.

Trait mindfulness may act as a moderator in the effect of gratitude on life satisfaction. Chen, Wu, and Chang (2017) found that the interaction between trait gratitude and trait mindfulness explained 2% of the variance in life satisfaction among 190 Taiwanese college athletes. In addition to performance-related variables, gratitude may also hold benefits for athlete mental health and well-being, particularly among adolescent and college-age sport populations. Since the general body of literature on gratitude has repeatedly reported meaningful relationships between gratitude and positive mental health and well-being, examining whether gratitude is related to better mental health and well-being among athletes and student-athletes in particular is worth investigating. College students in the U.S. are reporting increasingly more mental health concerns than ever before, and collegiate athletes are at equal and sometimes greater risk than the general college population, with one-third of college athletes in the U.S. reporting depressive symptoms (Cox, Ross-Stewart, & Foltz, 2017). This data corroborated the NCAA's report in 2016 which found that 30% of athletes reported being "intractably overwhelmed" in the past month (NCAA, 2016a). The organization recently released a best practices document for athletic departments, coaches, administrators, mental health professionals, sport psychology practitioners, and other relevant parties, emphasizing the importance of student-athlete mental health (NCAA, 2016b). Recently, the field of sport psychology has been charged with developing holistic, integrative, and innovative programming to address the mental health needs of college student-athletes, alongside performance enhancement goals and interventions.

2.4 Gratitude Interventions in Sport

While gratitude interventions have been widely studied in the positive psychology literature, there is only one known study to date which has explored the implementation of a gratitude intervention with athletes. Gabana et al. (2018) examined the impact of a one-time, 90-min Attitude of Gratitude workshop on 51 NCAA Division I college student-athletes in the U.S. The sample consisted of 27 male wrestlers and 24 female swimmers. The intervention was comprised of three components aimed at increasing athletes' state gratitude pre- to post-intervention: (1) didactic (i.e., learning about gratitude and its potential benefits in life and sport), (2) activity (i.e., gratitude list), and (3) discussion/debrief. After independently making a list of things they felt grateful for, athlete participants were prompted to reflect upon why they were grateful for each of the items, and then shared their responses with a teammate. The interventionist then facilitated a discussion among the larger group during which athletes reflected on how they felt whilst making the list and general reactions to the activity. Finally, athletes were debriefed on how to continue cultivating and practicing gratitude in their daily lives. Surveys were administered at three time points: pre- and post-intervention, and again at a 1-month follow-up.

Results of the Gabana et al. (2018) study indicated significant improvements in state gratitude, sport satisfaction, and perceived social support over time, supporting previous correlational studies (Chen, 2013; Chen & Kee, 2008; Gabana et al., 2017). Furthermore, significant decreases in athlete burnout and psychological distress were observed post-intervention, similar to findings of Chen and Chang (2014) and Wong, McKean Blackwell, et al. (2017). Given that this was the first study to test a gratitude intervention with athletes, future empirical studies are needed to investigate positive psychology interventions in sport. Findings are encouraging and hold promise for mental skills and life skills programmes for athletes which incorporate gratitude. Since significant time effects were observed on both measures of well-being and ill-being, gratitude interventions may have the potential to not only impact an athlete's performance and sport experience (i.e., increased sport satisfaction, decreased athlete burnout) but also their mental health and well-being (i.e., increased state gratitude and perceived social support, decreased psychological distress). Gratitude interventions may pose a creative and non-stigmatized tool for enhancing student-athlete well-being and may open the door for addressing mental health needs among this unique population.

3 Practical Implications for Multi-cultural Contexts

3.1 Athletes

Positive emotions have the potential to increase the closeness of interpersonal relationships (Fredrickson, 2009). Team sports, which rely highly on communication, collaboration, and cohesion, may benefit from PPIs because of the ability of positive emotions to produce a bonding effect. The culture of sport often brings together individuals from varying racial, ethnic, religious, sexual orientation, socio-economic, educational, and linguistic backgrounds. Positive emotions foster intergroup connectedness and allow one to identify more closely with others, transcending cross-cultural boundaries (Fredrickson, 2009). The positive effects of gratitude go beyond one's circumstances (Layous & Lyubomirsky, 2014); athletes of all ages and competition levels may reap the benefits of practicing gratitude, not only within their athletic experience, but in their daily lives as well. Furthermore, fostering a grateful mindset outside of sport may have the potential to transfer over to the athletic context. Gratitude may assist athletes in more productive responses to negative events (Nezlek et al., 2019), such as less-than-ideal performance outcomes, unexpected events (e.g., injury), and transition (e.g., into college, out of sport). Recent gratitude interventions geared toward improving college students' mental health have incorporated creative methods such as instant communication technology (Renshaw & Hindman, 2017). As technology, particularly social media, has become increasingly more prevalent in athletes' day-to-day lives, the use of technological methods to facilitate gratitude

practice should be a consideration for both practitioners and researchers aiming to reinforce gratitude as a habit.

3.2 Coaches

Given that coaches have the potential to impact athlete gratitude which can further impact numerous elements of an athlete's sport experience, coaches should consider fostering a team climate which values the virtue of gratitude by self-modelling and emphasizing gratefulness in the sport context. Coaches are also encouraged to practice positive encouragement and clear, constructive feedback, in order to reap the benefits of gratitude in regard to enhancing sport satisfaction and decreasing burnout among athletes. Research has shown that business teams which have higher positivity ratios (i.e., more positive statements to every negative statement within the boardroom) tend to perform better and be more flexible, creative, inquisitive, adaptable, and resilient (Losada & Heaphy, 2004). Positivity ratios greater than 3 to 1 have been revealed to be a hallmark of both flourishing relationships and optimal performance (Gottman & Silver, 2000; Fredrickson, 2009). The positivity ratio may also be relevant to team dynamics in sport, such as the interactions among teammates or between players and coaches. Modelling and encouraging a more positive team environment may facilitate flexibility, creativity, adaptability, resilience, curiosity, and performance. Expressing gratitude may be one way for coaches and athletes to increase their positivity ratio within the team setting.

3.3 Parents

Parents are also encouraged to be mindful of their positivity ratios with their children. Given the benefits of cultivating gratitude among youth, parents of young athletes should consider practicing and emphasizing the virtue of gratitude at an early age, so as to help youth foster positive emotions, learn prosocial behaviour, build coping resources, and develop cognitive reframing skills. Modelling the expression of grateful feelings, thoughts, and actions is recommended.

3.4 Sport Psychology Practitioners

Sport psychology practitioners may consider devoting more time to cultivating gratitude as a type of mental skill in sport, for the purpose of developing coping strategies and resilience, emphasizing social support, building team cohesion, and helping the athlete reframe negative experiences or performance outcomes to facilitate a growth-oriented mindset. Wong, McKean Blackwell et al. (2017) suggested incorporating

gratitude into cognitive-behavioural approaches which emphasize the impact of one's thoughts on emotions and behaviour. This approach is widely used among many sport psychologists to help athletes gain awareness of how their thoughts affect their emotions and actions in sport and beyond. Gratitude interventions could also be paired with mindfulness training, which may further assist athletes in becoming more aware of, accepting, or letting go of negative thoughts and emotions.

Practitioners should consider a number of factors when designing and implementing PPIs such as age, culture, social support, motivation, and effort (see Layous & Lyubomirsky, 2014). Person-activity fit is important when implementing PPIs, specifically related to enjoyment, benefit, and ease. People are more likely to adhere to activities they prefer, and experience greater increases in well-being when they enjoy the activity, feel benefited by it, and when it is not too difficult to complete (Layous & Lyubomirsky, 2014). Similarly, participating in a "preferred" activity (i.e., the person has indicated a preference for that specific concept and/or activity) has been shown to produce greater increases in well-being (Schueller, 2011). This has important implications for sport psychology practitioners aiming to introduce and/or continue administering PPIs to athletes and teams. Intra- and interpersonal factors that may influence the enjoyment, and in turn, the adherence of athletes to particular PPIs, should be considered. By gauging the particular dynamics of the group system (e.g., team climate), practitioners may adapt their approach to the team's unique culture. While person-activity fit is important, it is not the sole determinant of whether a PPI will be effective for a given individual or group (Layous & Lyubomirsky, 2014). Choosing activities that are engaging, efficacious, and backed by empirical support is paramount to PPI implementation.

Layous and Lyubomirsky (2014) noted that PPIs are not a "one-and-done" commodity meant to promise around-the-clock happiness: "Happiness-increasing strategies are not designed with the end goal of eliminating negative emotions altogether. The practice of positive activities can, however, serve as "daily emotional maintenance" for much of the general population. That is, if feeling down or stressed, an individual may be able to call upon a positive practice to mitigate or cope with her negative emotions" (Layous & Lyubomirsky, 2014, p. 28).

This more realistic approach of the utilization of PPIs calls upon active engagement with positive constructs at appropriate times. For instance, if an athlete participates in a gratitude intervention such as counting one's blessings once a week for one month, the athlete might later call upon this activity to increase positive emotions when experiencing adversity, recalling the positive aspects of life that bring happiness, hope, and appreciation. This is a way to build coping skills, and in turn, may foster positive habits and characteristics such as emotion regulation, mental toughness, and resilience.

4 Implications for Future Research

Although the fields of positive and sport psychology seem to be a natural fit, little research has been conducted to formally integrate the two fields (see McCarthy, 2011 for an overview of theoretical models examining the impact of positive emotions on sport performance and athlete psychological well-being). Researchers in both positive psychology and sport psychology should continue to explore state and trait gratitude among athletes, especially related to athlete mental health, well-being, and performance. Given that all studies on athlete gratitude have been conducted within the past decade, more research is needed on all fronts; that is, exploring the relationships between gratitude and other variables, parsing out mediators and moderators of these relationships, and testing the effectiveness of gratitude interventions in the sport context. Randomized controlled studies and those using comparison groups (e.g., gratitude intervention compared to a goal-setting intervention) are recommended, and researchers are encouraged to consider other potential variables impacting (a) levels of gratitude, and (b) effects of gratitude on athlete well-being and performance. These may include gender, sport type, team versus individual sport, cultural background, coach, competition level, and personality. More studies on U.S. athletes, athletes outside of the U.S. and Taiwan, and a wide range of developmental and competitive levels (e.g., youth sport, high school, collegiate, professional) would further add to the literature in this area, since current findings lack generalizability to specific sport populations (e.g., professional athletes).

Given that the majority of research on athlete gratitude has been conducted in Taiwan, athlete gratitude in more individualistic cultures such as the U.S. and Europe may look and function slightly differently. Chen and Kee (2008) found that among Taiwanese adolescent athletes, trait gratitude had a small but significant correlation with value traditionalism; specifically, athletes who had more respect for authority reported higher levels of gratitude. This demonstrates the importance of examining cultural factors that may influence one's experience of gratitude, such as collectivism and individualism. Culturally-adapted gratitude interventions may be a topic of further study and future researchers are encouraged to collect larger and more diverse samples.

A limitation of the first known study to explore a gratitude intervention with college athletes is that it utilized a one-time workshop, which may have minimal effects on an athlete's dispositional gratitude (Gabana et al., 2018). Athletes who continue to cultivate, practice, and express gratitude often may become more enlightened to the positive aspects of their life, and in turn, their athletic experience; therefore, longitudinal data on multi-session gratitude programmes should be examined in future research. Furthermore, this study did not utilize a control group, rendering it unclear whether significant positive outcomes post-intervention could be attributed to increased gratitude, directly. Future studies should compare gratitude interventions with other positive, neutral, and negative control conditions to elucidate and substantiate the potential effects of gratitude interventions in sport. In a similar vein, much of research on athlete gratitude consists of cross-sectional data, where causa-

tion cannot be inferred (e.g., Chen & Kee, 2008; Chen & Wu, 2014; Kee, Tsai, & Chen, 2008). While regression, mediation, and moderation analyses illuminate some of these findings (e.g., Chen, 2013; Chen & Chang, 2014; Chen et al., 2017; Chen & Wu, 2016; Gabana et al., 2017), more longitudinal data collected at multiple time points, especially when testing the effects of a gratitude intervention, is needed to give credibility to claims that cultivating gratitude in athletes is a worthwhile endeavor.

All of the research on athlete gratitude thus far has relied on self-report data which can be skewed by factors such as social desirability bias, demand characteristics, and dishonest reporting. Since gratitude can be classified as a thought, feeling, or behaviour, future studies may consider how to observe and record experiences and expressions of gratitude more organically. For example, Kini et al. (2016) measured behavioural gratitude by the amount of money participants gave away to a third party after receiving monetary support from a benefactor in a computer game. While this approach has its limitations as well, it would be interesting to consider how athletes might demonstrate gratitude cognitively, emotionally, or behaviourally within the context of sport, providing insight into how gratitude can be measured more objectively so as to reduce self-report bias. Researchers may consider utilizing social media platforms to examine athletes' public expressions of gratitude from a more qualitative, content-related perspective. In the future, performance outcomes might be examined alongside measures of gratitude to see if potential performance benefits exist for athletes who feel, think, or act with a grateful mindset.

Sampling issues can also limit the validity and generalizability of results. In a recent study by Chen and Chang (2017), participants aged 18 to 58 who self-identified as either current or former Division I, II, or III NCAA athletes were recruited online through Amazon Mechanical Turk software. Researchers have cautioned against explicitly listing eligibility requirements to minimize imposter respondents, as recent data have shown evidence to suggest that some participants falsify identification criteria in order to receive compensation for participation (Siegel & Navarro, 2019). Another limitation of Chen and Chang (2017) is that current and former athletes were analyzed together, which muddies conclusions given that many participants "had retired from their sports careers" (p. 655). This is especially problematic when measuring variables such as athlete burnout and team satisfaction, which are most accurately measured from a present or recent temporal standpoint. Reminiscing one's athletic career years later may not be representative of the athlete's experience at the time, since emotional memories may differ from non-emotional memories in regard to the details retained (Kensinger, 2009), thereby influencing the credibility and implications of results. Specifically, positive emotion has been associated with greater memory distortion than negative emotion, in that people who view an event as positive had less accurate memory for detail than those who interpreted an event as negative (Kensinger, 2009). Similarly, it would be expected that a current athlete would experience sport-specific gratitude differently than a former athlete who had retired from their sport years ago. While every study has its limitations, researchers and practitioners should examine all studies carefully, paying close attention to factors that could potentially compromise the validity and reliability of results.

Based on recent research demonstrating a connection between gratitude and resilience in the general college student population (Gupta & Kumar, 2015; Vieselmeyer et al., 2017), future studies should also explore whether gratitude is related to resiliency among student-athletes. Furthermore, future investigations could test whether gratitude interventions are efficacious in fostering resilience among athletes in both sport and in life (e.g., helping them cope with stressors, bouncing back from adversity, managing mental health concerns, or facilitating more positive outcomes after setbacks such as injury). Gratitude programmes implemented at the group level might be particularly well-suited for athletic environments. For example, injured college athletes from various sports teams could participate in a multi-session group program aimed toward cultivating gratitude during the process of rehabilitation and return to sport (e.g., see the Gratitude Group Program designed by Wong, McKean Blackwell et al., 2017). In addition to deriving potential benefits from gratitude cultivation and expression in a group setting, athletes might appreciate the opportunity to relate to other athletes experiencing a similar challenge or difficult time (e.g., injury, anxiety, depression, grief). Set within a gratitude framework, this may validate and normalize athletes' experiences, and lend itself to an even deeper bonding at the interpersonal level. Inspired by findings of Nezelek et al. (2019), having athletes keep track of daily events, perceived stress, state gratitude, and changes in affect could provide valuable information about when athletes feel more grateful, and whether this could serve as a buffer to negative events or daily stress.

Finally, it is worth reiterating that both Davis et al. (2016) and Dickens (2017) advocated for a temperate view of the impact of gratitude PPIs, given that more intervention studies are needed to demonstrate evidence for their efficacy. While empirical study on gratitude is flourishing, more research is needed to substantiate preliminary findings in the context of sport. That being said, research on athlete gratitude in the past decade has shown promising results for the potential of gratitude interventions to impact athlete mental health, well-being, and performance. A scientist-practitioner approach is strongly encouraged to ensure that sport psychology practitioners are operating from a place of empirically-supported treatment methods when designing interventions for athletes. Likewise, researchers are charged with maintaining an awareness of current issues in the field of applied sport psychology and athlete mental health so as to design studies relevant to practitioners' realities, thus lending further empirical support to current practice.

5 Conclusion

At the heart of the integration of sport psychology and positive psychology lies a holistic approach to athlete well-being. Researchers have found that athletes self-report both sport- and non-sport-related factors as contributors to overall well-being (Lundqvist & Sandin, 2014). An athlete's thoughts, emotions, and behaviours that are learned inside of the athletic arena have the ability to permeate other areas of the athlete's life. In a similar way, an athlete's personal mental health and well-being

can significantly influence their performance in sport (Morgan, 1985). Just as the development of physical skills takes time, effort, dedication, and repetition, so too does the mental training aspect of performance. Knowing when and how to summon positivity is essential to the successful application of positive psychology concepts to the sport domain (see Layous & Lyubomirsky, 2014). The more an athlete practices cultivating positive emotions such as gratitude through constructive activities, the more easily the athlete is able to draw upon these skills when needed during trying times (Wagstaff & Leach, 2015).

There may be times where it is useful for an athlete to demonstrate negative emotions such as anger and frustration. Experiencing negative emotions can foster motivation to improve one's athletic abilities. For example, feeling dissatisfied with one's performance can inspire an athlete to train harder both mentally and physically. Positive psychology acknowledges the utility of negative emotions, so long as they do not impair one's ability to function optimally. While negative emotions can be facilitative to an athlete's growth and development, cultivating positive emotions such as gratitude and hope may aid athletes in performing both on and off the field (Wagstaff & Leach, 2015). Incorporating positive constructs can also be used to address a difficult or negative experience, which may facilitate the growth process (e.g., expressing gratitude toward lessons learned, strategies employed, coping mechanisms, and available support systems).

Based on a review of the extant literature, it can be concluded that the cultivation and expression of gratitude within the sport context poses a range of potential benefits for athlete mental health, well-being, and performance. In summary, the following key points are highlighted:

1. The fields of positive psychology and sport psychology share a common interest in optimal human functioning and can benefit from mutual sharing of guiding theoretical underpinnings.
2. Experiencing positive emotions may actually facilitate successful outcomes, rather than positive emotions merely being predicated on success.
3. Intentionally cultivating positive emotions such as gratitude in times of adversity may enhance one's coping skills, ultimately fostering resilience.
4. Gratitude interventions such as making a gratitude list, gratitude journaling, or writing a letter of gratitude have been associated with positive mental health and physical health outcomes. Recent meta-analyses on gratitude interventions encourage a temperate interpretation of these findings and call for further empirical study in this area.
5. Gratitude may serve as a protective factor against ill-being by way of mechanisms such as positive cognitive reframing; an attentional shift toward the good things in life; awareness and acknowledgement of support networks; enhanced interpersonal relationships and social connectedness; increased compassion toward oneself and others coupled with lower levels of criticism; and the broaden and build effects of positive emotions.

6. Gratitude interventions implemented at the team level may have the potential to strengthen social bonds, positively impacting athlete, team, and coach relationships.
7. Coaches and parents play a key role in promoting a grateful mindset, as athletes' thoughts, emotions, and behaviours are often shaped by those who are closest to them. Modelling an attitude of gratitude at home and within the team setting can empower athletes to cultivate and practice gratitude on a daily basis.
8. Athlete gratitude has been associated with a number of indicators of athlete well-being such as higher life satisfaction, sport satisfaction, team satisfaction, self-esteem, and team cohesion; better quality of relationships with teammates and coaches as indicated by higher levels of perceived social support and trust in one's coach; and lower levels of athlete burnout and psychological distress.
9. Grateful thinking may help athletes respond more productively to negative events, such as setbacks, perceived failures, unexpected events such as injury, and transitions.
10. Given the association between athlete gratitude and positive indicators of well-being, sport psychology practitioners (i.e., sport psychologists and mental performance consultants) are in a unique position to use empirically supported gratitude interventions to enhance athlete mental health and performance within the context of psychological skills training and/or mental health counseling, at both the team and individual levels.
11. Sport psychology practitioners should consider a number of factors when designing and implementing gratitude interventions such as age, gender, race/ethnicity, cultural background, social support, motivation, personal preference, group dynamics, and effort.

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