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Safe space or high stakes environments: comparing self-compassion in differing sport contexts in canada

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Self-compassion has been identified as a resource for athletes to manage demanding and evaluative sport experiences. Despite growing research interest, there remains unanswered questions about athletes' self-compassion levels across genders, sport types (e.g., team versus individual), and competition levels (e.g., local versus provincial). Further investigation is also needed to identify factors that facilitate or deter athletes' use of self-compassion. With a sample of athletes (N = 146; M_{age} = 22.26 years) living in Canada, the purpose of this study was to (a) examine athletes' self-compassion levels across differing sport contexts, and (b) explore perceptions of self-compassion as enabled and/or restricted in their sport contexts. Aesthetic sport athletes had lower self-compassion (M = 2.95) than non-aesthetic sport athletes (M = 3.16; t(139) = -1.88, p = .03, d = 0.34), and athletes competing locally had higher self-compassion (M = 3.32) than athletes competing provincially (M = 3.04), nationally (M = 2.99), and internationally (M = 2.86; F(4,139) = 2.20, p = .04, $\eta 2 = .06$). Self-compassion did not differ between genders or team and individual sport athletes. Salient environmental factors that nurture athletes' self-compassion included providing a safe and supportive environment and emphasizing doing one's best in sport, whereas excessive negativity from others and perceived pressures in sport inhibit athletes' self-compassion. Our findings suggest target groups for intervention and considerations for self-compassionate sport environments.

KEY WORDS: Athletes, Competition, Self-attitude, Sport psychology.

Introduction

Self-compassion was brought into general psychology research close to the turn of the century (see Neff, 2003a, 2003b), and was later explored as a resource for athletes to manage their demanding and difficult sport experiences (Mosewich et al., 2011). Self-compassion is an accepting, supportive,

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and non-judgmental attitude towards the self that is particularly useful during challenges and setbacks (Neff, 2003a). More specifically, self-compassion is a multidimensional construct consisting of three components that combine and mutually interact to create a self-compassionate mindset: *self-kindness* (being understanding and accepting rather than harshly enforce self-criticism during adversity), *common humanity* (recognizing that one's experiences are not isolating, rather everyone is connected through imperfection), and *mindfulness* (keeping thoughts and feelings in balance rather than exaggerating or avoiding them; Neff, 2003a). Researchers have positioned self-compassion as a resource or collection of skills that can be taught (Ingstrup et al., 2017; Neff & Germer, 2013, 2018) to help athletes navigate difficult sport experiences (Mosewich et al., 2019a).

Self-Compassion in Sport

Competitive sports expose athletes to demanding and evaluative environments fraught with challenges that can result in maladaptive emotions, cognitions, and behaviours (Crocker et al., 2015; Ferguson et al., 2014; Lunde & Gattario, 2017). The sport environment is replete with opportunity for setbacks, including appearance- and performance-based evaluations, failure to meet goals, managing injuries, navigating interpersonal stressors with coaches and teammates, and reaching a plateau in performance or training. Athletes who are not equipped with skills and resources to manage their difficult sport experiences are susceptible to unhealthy outcomes including body dissatisfaction, disordered eating, excessive exercising, shame, and training through injuries (Krane et al., 2001; Mosewich et al., 2009). Researchers have found that women athletes with higher levels of self-compassion have greater adaptive sport appraisals, body appreciation, goal progress, initiative, personal growth, positivity, purpose in life, responsibility, and self-acceptance (Ferguson et al., 2014, 2015; Mosewich et al., 2019b). In contrast, women athletes with low levels of self-compassion tend to have greater avoidance-coping strategies, catastrophizing thoughts, fear of negative evaluation, negative affect, perfectionistic concerns, maladaptive selfcriticism, and shame and guilt proneness (Huvsmans & Clement, 2017; Jeon et al., 2016; Lizmore et al., 2017; Mosewich et al., 2011, 2013, 2019b; Reis et al., 2015). Though less research attention has been dedicated to men athletes' self-compassion, early evidence indicates that men athletes with higher levels of self-compassion have greater personal growth, positive attitudes towards help-seeking, positivity, purpose in life, responsibility, and self-acceptance, and lower concern over mistakes, fear of failure, fear of negative evaluation, self-stigma of seeking help, state self-criticism, and internalized shame (Reis et al., 2019; Wasylkiw & Clairo, 2018).

Given the growing body of research boasting the adaptive associations of self-compassion, efforts have been directed at teaching athletes to use selfcompassion as a resource in response to their difficult sport experiences. Mosewich et al. (2013) developed a 7-day self-compassion in sport intervention for women athletes who self-identified as self-critical. The athletes engaged in psychoeducation and writing modules to prompt the three components of self-compassion. Following the intervention, athletes reported higher levels of self-compassion and lower levels of state self-criticism, state rumination, and concern over mistakes compared to a control group. Using similar strategies (i.e., psychoeducation and writing tasks), Röthlin and Leiggener (2021) found that a two-week self-compassion intervention resulted in increased self-compassion and decreased somatic performance anxiety among sport climbers. The results of these interventions demonstrate the benefits of self-compassion for athletes' sport experiences. Despite research attention and applied efforts to teaching self-compassion (see Mosewich, 2020), key questions remain unanswered that limit our ability to maximize the application of self-compassion in sport.

Statement of the Problem

Outside of the sport context, there is accumulating evidence that women tend to have lower self-compassion levels than men (Yarnell et al., 2015, 2019). Women tend to judge themselves negatively and are often socialized to prioritize the needs of others over their own, which may impact their ability to give themselves compassion (Yarnell et al., 2015). It is possible that women's tendency to be more critical of themselves extends to the sport context, as women athletes can struggle with managing their difficult sport experiences (Krane et al., 2001; Mosewich et al., 2009). Indeed, Jansen et al. (2021) found that women athletes had higher rumination and worry than men athletes. Another sport-specific study found that women athletes have lower self-compassion than men athletes (Amemiya & Sakairi, 2020). While these findings support the general tendency for women to have lower selfcompassion levels than men, the researchers noted a large discrepancy of male to female athletes (126 and 25, respectively) upon which this conclusion rests. Further examination is, therefore, warranted to examine gender differences in self-compassion among athletes.

It is possible that differing sport contexts, such as team sport environments versus individual sport environments, may be more amenable to ath-

letes' use, and subsequent levels, of self-compassion. Team sports and individual sports differ in the level of reliance among athletes (Chelladurai & Saleh, 1978). Team sports, such as basketball and volleyball, include a high degree of interdependency among teammates to achieve success in sport (Baker et al., 2003). Individual sports, such as swimming and wrestling, include a high degree of independence to achieve success in sport (Baker et al., 2003). Crozier et al. (2019) found that athletes who competed in team sports were more likely to be self-compassionate if they perceived their teammates were engaging in self-compassion. Their findings suggest that social norms within team sports may facilitate a culture of self-compassion that may not be evident within individual sport contexts. Further, the shared experiences and perceived social support that exists between teammates (DeFreese & Smith, 2013) might naturally provide more opportunities to experience common humanity and, subsequently, self-compassion.

Different psychosocial experiences might also exist between aesthetic and non-aesthetic sport contexts. Aesthetic sports, such as gymnastics and synchronized swimming, are often considered "appearance-oriented" in which extreme leanness is required to fulfill athletic and aesthetic standards (Krentz & Warschburger, 2011), with performance outcomes based on subjective evaluations made by others (e.g., adjudicators, judges). Participation in aesthetic sports has been associated with body image-related difficulties and high levels of disordered eating attitudes and behaviours (Paixão et al., 2020). Aesthetic sport athletes often adopt defensive and perfectionistic strategies in an attempt to present themselves as meeting extreme appearance standards (Paixão et al., 2020). Women who participate in aesthetic sports have lower psychosocial health (i.e., sleep health, mental quality of health) compared to non-aesthetic sport athletes and non-athletes (Mayolas-Pi et al., 2021). Given that aesthetic sport athletes are harder on themselves to achieve extreme appearance and performance standards, it is anticipated that they have lower self-compassion levels compared to athletes in non-aesthetic sports.

Finally, athletes competing at higher levels experience heightened training and competition demands (Bruner et al., 2008) and a greater likelihood of overtraining and injury (Nixdorf et al., 2016), which have the potential to negatively impact their mental health (Poucher et al., 2019). It is therefore probable that self-compassion may be less evident in athletes competing at higher levels, where a reliance on self-criticism may be considered necessary to reach one's potential in sport (Ferguson et al., 2014). In contrast to this position, Walton et al. (2020) found no self-compassion differences between recreational athletes and competitive athletes. However, the researchers' dichotomous competition categorization does not capture the complex and nuanced ways of defining ath-

lete status (Swann et al., 2015), necessitating the need for more research to examine self-compassion among athletes competing at a range of levels.

Researchers are beginning to explore how self-compassion can be learned and taught, and several personal (e.g., self-awareness, self-acceptance) and environmental factors (e.g., coach, teammates, parents) have been identified as contributing to athletes' development of self-compassion (Frentz et al., 2019; Ingstrup et al., 2017). The current knowledge base is contextualized to high performance athletes and/or those identifying as highly self-compassionate. More research is needed to explore how self-compassion may be fostered and hindered in varying sport environments. It is important to consider differing sport contexts (i.e., team versus individual, aesthetic versus non-aesthetic, competition levels), as they may lead to different experiences of self-compassion. Identifying attributes of the sport context that may nurture or deter athletes' use of self-compassion will contribute to creating self-compassionate sport environments.

Focus of the Current Study

The heightened research attention on self-compassion in sport and the growing number of identified advantages associated with self-compassion underscore its relevance within sport. However, important questions related to athletes and their sport environments require resolution to inform next steps. For instance, do gender differences exist in athletes' self-compassion? Are certain sport contexts, such as team sports, individual sports, aesthetic sports, or non-aesthetic sports, more conducive to self-compassion than others? Does self-compassion differ across athletes in varying levels of competition? What factors within the sport environment enable or deter athletes' use of self-compassion in sport? Answers to these questions will help inform whether athletes from diverse sport environments differentially experience self-compassion (Walton et al., 2020), and identify who to target and how to target them in future self-compassion research and intervention (Mosewich et al., 2019a).

Purpose Statement and Hypotheses

The purpose of this study was twofold. Firstly, to examine differences in self-compassion between: (a) women and men athletes; (b) team sport athletes versus individual sport athletes; (c) athletes in aesthetic sports versus non-aesthetic sports; and, (d) athletes in varying competition levels. Secondly, to explore athletes' perceptions of self-compassion as enabled and/or restricted in their sport contexts. We had four hypotheses: (1) women athletes

letes would have lower self-compassion than men athletes; (2) team sport athletes would have greater self-compassion than individual sport athletes; (3) athletes in aesthetic sports would have lower self-compassion than athletes in non-aesthetic sport; and (4) athletes at more competitive levels would have lower self-compassion than those competing at lower levels. No hypotheses were set for the exploratory portion of the study purpose.

Methods

PARTICIPANTS

The participants were 146 athletes living in Canada who had competed in their primary sport within 1 year of study participation. The most common primary sports reported were soccer (n = 33), ice hockey (n = 12), and basketball (n = 11), with the majority of participants competing for 2-5 years (n = 47), 5-10 years (n = 29), or more than 10 years (n = 38). Participants ranged in age from 18-35 years ($M_{age} = 22.26$, SD = 3.75) and the majority of participants self-identified as White (81.51%), followed by South Asian (6.16%) and Black (4.11%).

RESEARCH DESIGN AND PROCEDURE

Our research was rooted in a pragmatic philosophical worldview, which embraces a pluralistic view that both quantitative and qualitative data provide optimal insight into research questions (Creswell & Plano Clark, 2018). Moreover, our interpretive epistemological orientation assumes that reality and knowledge are grounded in individual perceptions resulting in participants' perceptions being prioritized (Whaley & Krane, 2011). We applied a concurrent mixed methods research design (Kowalski et al., 2018) and data were collected via online self-report survey, including both closed- and open-ended questions. This design permitted us to include both quantitative and qualitative data to provide different types of information that, together, provide greater insights into our study purpose than either approach on its own. After receiving ethical approval, convenience sampling was used to invite athletes living in Canada to participate in the study through a variety of means (e.g., online university posts, social media). Participants visited a link to access the survey, which began with an informed consent form followed by the measures identified below, in the order of presentation. Average questionnaire completion time was 10 minutes.

MEASURES DEMOGRAPHICS

Participants completed a questionnaire that included questions about general demographic information (e.g., age, gender) and various aspects of sport participation and contexts, as itemized below.

Primary sport. Participants reported the primary sport they participate in as an athlete. **Sport Context.** *Team sport versus individual sport:* Participants indicated whether their primary sport consists of competing with a team ("a high degree of interdependency among team-

mates to achieve success in sport") or individually ("a high degree of independence to achieve success in sport"), based on definitions by Chelladurai and Saleh (1978) and used in other sport psychology research (e.g., Baker et al., 2003). *Aesthetic sport versus non-aesthetic sport: Participants indicated whether they perceive their primary sport to be aesthetic ("looking beautiful or being lean is encouraged") or non-aesthetic ("looking beautiful or being lean is not relevant").

Level of Competition. Participants reported the highest level they currently (i.e., within the past 12 months) compete at: local ("against athletes from your city/town"); provincial ("against athletes from around the province"); regional ("against athletes from other provinces"), national ("competing at national championships"); elite for age ("at an international level against athletes of the same age group"); or international ("for your country of citizenship at an international level"). These categorizations have been used to classify athletes' competition levels in previous research (e.g., Eke et al., 2020; Ferguson et al., 2014, 2015).

Self-Compassion

The Self-Compassion Scale – Athlete Version (SCS-AV: Killham et al., 2018) was used to measure participants' self-compassion in sport. Researchers have indicated the need to assess self-compassion within the context of sport, rather than general or non-contextual self-compassion, as athletes may view self-compassion as context-specific (Walton et al., 2020). The SCS-AV is a slightly modified version of the 26-item Self-Compassion Scale (SCS; Neff, 2003b) to include language specific to the sport context. The number of items per subscale, number of total scale items, general content of each item, and scoring procedures remain unchanged between the original SCS and the SCS-AV. Like the original measure, the SCS-AV has six subscales: self-kindness (e.g., "I'm tolerant of my own athletic flaws and inadequacies"), self-judgment (e.g., "when times are really difficult in my sport, I tend to be tough on myself"), mindfulness (e.g., "when something upsets me in my sport I try to keep my emotions in balance"), over-identification (e.g., "when something upsets me in my sport I get carried away with my feelings"), common humanity (e.g., "I try to see my failings as part of the sport experience"), and isolation (e.g., "when I fail in my sport, I tend to feel alone in my failure"). Response options range from 1 (almost never) to 5 (almost always), and a mean score is calculated after reverse coding negative items, with higher scores indicative of greater self-compassion (Neff, 2003b). Scores on the SCS-AV have demonstrated test-retest reliability (r = .81, p< .001), were negatively correlated with a measure of self-criticism in sport (rs = -.52 to -.61, p < 0.001), and demonstrated internal consistency reliability ranging from α = .85 to α = .88 in a sample of women athletes (Killham et al., 2018).

EXPLORATORY QUESTIONS

To garner insight into self-compassion in athletes' sport contexts, exploratory questions (primarily in the form of open-ended questions) were posed. These questions went beyond

¹ Additionally, based on Evans et al. (2012), participants further delineated their team sport context (i.e., integrated or segregated) or individual sport context (i.e., collective, cooperative, contrient, independent, or no team/solitary). These more specific classifications would be included for further analysis if differences were observed between the dichotomous team and individual sports categories.

assessing individual levels of self-compassion to inquire about athletes' perceptions of the environments that surround them in sport, and how their sport contexts may shape or hinder the use of self-compassion. A brief written description of self-compassion was provided (as defined by Neff [2003a]) and participants were asked "Does your primary sport environment encourage you to be self-compassionate?", with response options ranging from 1 (almost never) to 5 (almost always). Participants were invited to explain and/or provide an example of how their sport environment restrict you from being self-compassionate?", with response options ranging from 1 (almost never) to 5 (almost always). Participants were invited to explain and/or provide an example of how their sport environments restrict self-compassion.

Data Analysis

Hypothesis Testing

The statistical program G-Power was used a priori to determine our target sample size. Assuming a small-to-medium effect size with 80% power and $\alpha = .05$, our target sample size was 156 participants. Originally, 182 participants completed the online survey. Participants missing two or more data points from the same subscale of the SCS-AV were deleted from the data set (n = 36), resulting in the final sample size of 146 participants. Ten participants had one data point missing from the SCS-AV (not the same item), and within-person subscale mean substitution was used to estimate each missing data point (Tabachnick & Fidell, 2019). Scores on the SCS-AV did not violate assumptions of normality, and there were no outliers. Further, evaluation of the assumption of homogeneity of variance was satisfactory. Means and standard deviations of the SCS-AV scores were calculated for the following groups: full sample, women athletes, men athletes, team sport athletes, individual sport athletes, aesthetic sport athletes, non-aesthetic sport athletes, and each level of competition (i.e., local, provincial, regional, national, and international).² Independent t-tests were used to compare differences on the SCS-AV between the following groups: women and men athletes, team sport versus individual sport athletes, and aesthetic sport versus non-aesthetic sport athletes.³ ANOVA was used to compare differences between competition levels, and Fisher's Least Significance Difference (LSD) for post hoc comparisons. Statistical significance was set at p < .05. Cohen's d (for ttests) and eta squared (for ANOVA) were used to indicate effect size (Tabachnick & Fidell, 2019; Vincent & Weir, 2012), with values of 0.20, 0.50, and 0.80 indicating small, moderate, and large effects, respectively, for t-tests, and values of 0.01, 0.06, and 0.14 indicating small, moderate, and large effects, respectively, for ANOVA (Cohen, 1988).

² Given (a) the low numbers of participants representing elite for age (n = 6) and international (n = 8) levels of competition and (b) that both definitions referenced international-level competition, these competition levels were collapsed into one category (i.e., international) for data analysis.

³ Given that athletes in aesthetic sports often participate in their sport at a high level from a young age, an ANOVA tested the potential influence of age on self-compassion prior to running the analysis on aesthetic sport versus non-aesthetic sport athletes. There was not a significant main effect of age, F = 1.44, p = .14, suggesting that age was not influencing self-compassion.

EXPLORATORY QUESTIONS

Responses to the exploratory open-ended questions were analyzed through inductive content analysis following the recommended stages outlined by Elo and Kyngäs (2008) – preparation, organization, and reporting – and the data were examined separately by question. In the preparation stage, open-ended written responses were downloaded from the online survey platform into Microsoft Excel. Beginning with the first open-ended question (i.e., how athletes' sport environments encourage self-compassion) two members of the research team read and re-read all responses to permit familiarization with the data. Though one member of the research team led subsequent data analysis steps, the two research team members worked together throughout the meaning making process to permit the use of a critical friend (Smith & McGannon, 2018) to discuss and critique interpretations during various stages of data analysis. In the organization stage, the data were re-read multiple times while documenting impressions, thoughts, and ideas. Open coding took place whereby each segment of text was coded (meaningfully labelled) with a term or phrase that captured its identified meaning. Maintaining a systematic, yet open, coding process, several iterations of codes were developed before identifying a cohesive coding scheme. Codes interpreted to share meaning were then clustered together, reviewed for fit, and labelled as content-specific themes. The reporting phase includes the presentation of themes and direct quotes from participants. This approach was also used to examine the second open-ended question.

Results

DESCRIPTIVE STATISTICS AND SCALE RELIABILITY

Descriptive statistics for the full sample and sub-groups are presented in Table I. The majority of participants reported participating in a team sport (n = 103) compared to an individual sport (n = 63) as their primary sport. The majority of participants indicated their primary sport was non-aesthetic (n = 104) compared to aesthetic (n = 37). The most frequent competition level reported was provincial (n = 39), followed by local (n = 35), national (n = 33), regional (n = 23), and international (n = 14). Scores on the SCS-AV had an internal consistency scale reliability of $\alpha = .92$.

Hypothesis Testing

Table I contains the results of hypothesis testing, including *t*-tests between genders and the various sport contexts, and ANOVA across competition levels. Contrary to our first two hypotheses, there were no differences on SCS-AV scores between women athletes versus men athletes, or team sport athletes versus individual sport athletes. Our third hypothesis was supported in that aesthetic sport athletes had lower scores on the SCS-AV

Table I	
Descriptive Statistics and Results of Hypothesis To	esting.

Group	п	SCS-AV Range	SCS-AV Mean (SD)	Statistic	<i>p</i> -value	Effect Size
Full data set	146	1.74-4.75	3.10 (0.60)			
Gender ^a						
Women	80	1.74-4.75	3.09 (0.64)	t(141) = -0.39	.35	d = 0.07
Men	63	1.95-4.28	3.13 (0.55)			
Sport contextb						
Team	103	1.95-4.33	3.09 (0.57)	t(144) = 0.16	.43	d = 0.03
Individual	43	1.74-4.75	3.11 (0.66)	. (-11)	*	
Aesthetic	37	1.74-4.33	2.95 (0.63)	t(139) = -1.88	.03	d = 0.34
Non-aesthetic	104	1.95-4.75	3.16 (0.59)			
Competition level ^c						
Local	35	2.20-4.53	3.32 (0.55)	F(4,139) = 2.20	.04	$\eta^2 = .06$
Provincial	39	2.15-4.28	3.04 (0.54)*	- (1,->>) =.==		1
Regional	23	1.74-4.03	3.11 (0.53)			
National	33	1.95-4.33	2.99 (0.59)*			
International	14	2.01-4.31	2.86 (0.75)*			
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Note. SCS-AV = Self-Compassion Scale – Athlete Version. All reported *p*-values are one-tailed.

than non-aesthetic sport athletes, with a corresponding small-to-moderate effect size. Our fourth hypothesis was also supported in that the ANOVA identified differences in SCS-AV scores across competition levels, with a corresponding medium effect size. Fisher's LSD post hoc tests revealed that athletes competing at the local level had significantly higher SCS-AV scores than athletes competing at provincial (p = .02), national (p = .01), and international (p < .01) levels.

EXPLORATORY QUESTIONS

Responses to open-ended questions provide insight into athletes' perceptions of self-compassion in their sport environments. Participants' ratings of the extent to which their sport environment encourages self-compassion varied from almost never (5.56%), seldom (19.84%), sometimes (27.78%), often (28.57%), and almost always (18.25%). Nearly 75% (n = 108) of participants explained how their sport environment encourages them to be self-compassionate, and these participants had an average SCS-AV score of 3.08 (SD =

^a Three participants did not report gender. ^b Five participants did not report aesthetic sport versus non-aesthetic sport.

Two participants did not report competition level. Significantly lower than local competition level (p < .05), as indicated by Fisher's Least Significant Differences post hoc analyses.

0.63, range 1.74-4.75). Five themes represent their responses (see Table II). The most common explanations referenced sport environments that *provide* safe space to be self-compassionate. For instance, athletes reported they could be open and honest (with themselves and others) in their sport environments without consequence (e.g., decreased playing time), which generated an authentic sense of belonging. Another example of "safe space" was the support athletes received from others (e.g., encouragement from coaches or teammates) and even instances when self-compassion was modeled by others. Some athletes identified formal mental performance training that allowed them to learn about self-compassion in a trusting environment. Sport environments that *emphasize doing your best* were identified as nurturing self-compassion because they focus on learning, putting errors into perspective, and encouraging each other while striving for one's goals and pursuits. Athletes noted that these environments allow them to focus on the present or future rather than dwelling on mistakes or failures in the past. Other responses suggested that self-compassion is an *individual attribute or choice* that is self-generated rather than context-dependent. These responses pointed to self-compassionate athletes having an inherent openness to learn and grow, and to make decisions for their greater good (rather than impulsively). In contrast to this individualistic perspective, others reported that the inherent culture of sport permits self-compassion. These athletes described sport as a platform to demonstrate passion. teamwork, health, and wellness; values they perceive are linked with self-compassion. Still other athletes reported that self-compassion is not directly encouraged in their sport environment. In these responses, some athletes recalled receiving contradictory messages from their coaches and sport support persons by being told they should not be so hard on themselves if they make a mistake, but they should not make the same mistake twice. Others shared examples where self-compassion is needed but it is not modelled or encouraged.

Participants also rated the extent to which their sport environment restricts them from being self-compassionate, with responses ranging from almost never (35.71%), seldom (20.64%), sometimes (33.33%), often (8.73%), and almost always (1.59%). Slightly over 60% (n = 89) of the sample provided an explanation, and these participants had an average SCS-AV score of 3.10 (SD = 0.62, range 1.74-4.75).⁵ Participants' open-

⁴ Participants who did not explain how their sport environment encourages them to be self-compassionate (n = 38) had an average SCS-AV score of 3.15 (SD = 0.41, range 2.10-4.08).

⁵ Participants who did not explain how their sport environment restricts them from being self-compassionate (n = 57) had an average SCS-AV score of 3.09 (SD = 0.57, range 2.10-4.33).

TABLE II
Themes and Supporting Quotes of how Athletes' Sport Environments Encourage Self-Compassion.

Themes	Supporting Quotes ^a
Provide safe space	"More trend in hockey to be open about troubles and being able to talk to people about the journey you're going through" (man, ice hockey, provincial) "It's a very positive environment" (man, curling, provincial) "teammates communicate well, asks how things are going, and acknowledges when they are or aren't going well. The open communication helps me remember that I don't completely suck because I'm in a 'slump'knowing they will still talk to me even if it's not going well helps remind me that I'm okay and it's okay that I'm not always at the top of my game" (woman, slo-pitch, local) "My team has a couple training campswe focus some time on mental training sessions. These address elements of self-compassionWe also form a sort of 'buddy system'This person knows what we need in the moment and they serve to 'pick us up' and help us reset our bad feelings. This sense of compassion from someone else makes it easier for us to be kind to ourselves' (woman, ultimate frisbee, national)
Emphasize doing your best	"the coaches emphasize doing your best and striving for excellence through doing your best" (man, karate, international) "there is a group understanding that there can only be one winner and we all tried our best, so we put an emphasis on being happy for the person who won" (woman, dance, international) "you cannot dwell on negative events that occur and use any challenges as learning opportunitiesmy coachesgive me praise and put minor mistakes into perspective when I start to blow them out of proportion" (woman, soccer, regional) "curlers and coaches know that there will always be misses so coaches and teammates are always encouraging one another to put the missed shot behind you, move onto the next one and not to beat yourself up over it" (man, curling, provincial)
Individual attributes or choices	"For me, quitting college hockey was a form of self-compassion. I had to recognize that I couldn't mentally strain myself anymore and, in the end, had to step backto preserve my well-being. I recognized thatneeded a break" (woman, ice hockey, local) "it is a team sportthere are those players who play more individuallyand thus take downfalls personally who aren't as into the whole self-compassion idea" (woman, football, international) "it also combines with peoples' innate temperaments" (man, soccer, provincial) "with my own personal mindsetshifting to a more self-compassionate oneI am better at putting my own mistakes in perspective" (man, soccer, national)
The inherent culture of sport	"We encourage our dancers to love the bodies they are in, be grateful for what they can do, and work hard for what they can't do so they can improve. Reminding them that we learn from our mistakes and we grow stronger from falling down" (woman, dance, national) "The team I play on is very optimistic in that my teammates play for the passion of the sport, rather than the glory of winning. The ringette environment does encourage players to be self-compassionate through providing players with a board of people to turn to" (woman, ringette, provincial) "I would say that the group dynamics of the people on the team has a huge effectand the importance of the event in question, plus the context of the game or competition. All events are not created equalI have to answer that it would depend on both the team and the event" (man, soccer, provincial) "It is important to take care of your body and mind always when being a distance runner because of the high amount of training we do every day" (man, track and field, national)

(Continued) - Table II

Themes	Supporting Quotes ^a
Self-compassion is not directly encouraged	"most coaches are old school and have a very old hard-headed mentality that involves next to no caring/encouragement for the player (man, soccer, competition level not reported) "harder to bring yourself up after a loss, it is not talked about" (woman, volleyball, national) "there is no time for worrying about your own feelings. It's about the team" (woman, softball, national) "wants you to be hard on yourself so you can be perfect" (man, lacrosse, national)

Note. Themes appear in order of frequency, with the most salient theme presented first and the least common theme presented last.

ended responses are represented by six themes (see Table III). The most salient explanations referenced a negative spiral from others in that athletes recalled a lack of understanding or compassion from coaches and teammates, harsh comparisons with others, and a lack of recognition for one's efforts. Athletes explained that environments with a high emphasis on winning and needing to prove oneself to others contributed to a negative spiral that restricts self-compassion. Other athletes reported sport as a fastpaced and high stakes context where the focus needs to be on the game, your teammates, or competing, which leaves little time for self-reflection or selfcare. Specific "fast-paced and high stakes" examples included tryouts or post-season competitions where perceived pressures and expectations to perform are high. Other athletes described that self-compassion is rejected, period. In these explanations, athletes either personally viewed self-compassion as a weakness (e.g., selfish) or perceived that others (e.g., coach, teammates) view it as such. The suggestion was that athletes interested in being self-compassionate should be practicing it on their own time (i.e., outside of sport). The inherent culture of sport was also identified as restricting the practice of self-compassion, with reference made to perfectionistic demands and the objectivity of sport performance that leave little room for acceptance of failures. Others reported that self-compassion is not directly restricted in their sport environment; rather, self-compassion is simply overlooked or not a focus. Finally, though it was the least salient theme, some athletes noted that *individual attributes or choices* dictate if self-compassion is restricted, rather than the larger sport environment being a restrictive force.

^a Supporting quotes are accompanied by participants' self-identified gender, primary sport, and competition level.

TABLE III
Themes and Supporting Quotes of how Athletes' Sport Environments Restrict Self-Compassion

Themes	Supporting Quotes ^a
Negative spiral from others	"teammates may not be compassionate towards you if you make mistakes that are costly to the team. This may perpetuate over time with more mistakes, which can be restrictive in regards to self-compassion" (man, soccer, local) "I have had difficulties with the coaches which has led me to have poor self-compassion towards myself within a sporting background and has actually led to me retiring from some sports" (man, karate, international) "I have the teammates that get mad about it, and then grow in anger when other people aren't angry like them. In these times, it can be very challenging to be self-compassionate" (woman, basketball, international) "It becomes restricting when a coach or teammate calls you out on it, which in turn can really cause excessive negative thought towards the action or performance that led to mistakes" (woman, ice hockey, local)
Fast-paced and high stakes context	"It can be difficult around the tryout period during pre-season because you're afraid that someone else will take your spot. This can cause you to have a lot of self-doubt and feelings of insignificance" (woman, soccer, local) "With the constant action that occurs, there is little time to self-reflect on what happens" (man, rugby, regional) "Team needs you to be the best and perfect. Can't be self-compassionate when you mess up" (man, lacrosse, national) "I don't have much time to decompress after a bad goal" (woman, ice hockey, local)
Self-compassion is rejected, period	"during my times as a varsity athlete, self-compassionate mindsets or attitudes were highly restricted" (man, soccer, national) "Wanting to be stronger as a person and not show weakness" (man, ice hockey, provincial) "the full focus should be on wrestling not yourself" (woman, wrestler, national) "Teammates and coaches usuallyput the good of the team before your own mentality" (woman, basketball, national)
The inherent culture of sport	"to be competitive feeling good is seldom of primary importance leading up to important competitionhave to considerwhat it takes to achieve your goals and usually that doesn't involve being comfortable" (man, powerlifting, national) "In a sport that rewards perfection, there is little room for compassion of any kind" (woman, figure skating, provincial) "Simply because it is not subjective; a specific time or distance is earned which either indicates failure or success. It's tough to look past a failure because the time/distance feels like proof of inadequacies" (man, track and field, regional) "As a goalkeeper it is very easy to get down on yourself whenever a goal is scored on you. Other people tend to blame the goals scored in a game strictly on the goalkeepers" (woman, soccer, regional)
Self-compassion is not directly restricted	"While the environment isn't always the most compassionate I would not say that it fully restricts self-compassion" (woman, football, international) "there is no official statement, rule, or structure restricting you from being self-compassionate" (man, soccer, local) "It doesn't stop me from being self-compassionate. It is just not part of the culture in an overt wayI wouldn't say it's at the forefront of

(Continued) - TABLE III

Themes	Supporting Quotes ^a		
	coaches/teammates mandate to encourage self-compassion" (man, hockey, local) "I don't feel that it encourages me to be self-compassionate, but I don't think it discourages it either" (woman, volleyball, local)		
Individual attributes or choices	"If there is any lack of self-compassion it is more from the individual than the ringette community" (woman, ringette, provincial) "It's up to the individual and maybe his teammates to be harsh on themselves" (man, soccer, local) "that is a personal choice" (man, volleyball, local) "I don't believe any sport can or should restrict you to not be self-compassionate towards yourself it's your own body, your own mind and it's your own power honestly to make yourself feel better or safe" (woman, soccer, national)		

Note. Themes appear in order of frequency, with the most salient theme presented first and the least common theme presented last.

^a Supporting quotes are accompanied by participants' self-identified gender, primary sport, and competition level.

Discussion

The purpose of this study was to (a) examine differences in athletes' selfcompassion across varying sport contexts, and (b) explore athletes' perceptions of self-compassion as enabled and/or restricted in their sport contexts. Our results show that athletes within aesthetic sports, such as baton twirling and gymnastics, have lower self-compassion than athletes within non-aesthetic sports, such as ice hockey and soccer. Further, athletes who compete at the local level have higher self-compassion than athletes who compete provincially, nationally, and internationally. Participants identified several ways their sport environments encourage and restrict the use of self-compassion. Sport environments that provide safe spaces and emphasize doing one's best were identified as enablers of self-compassion. In contrast, negativity from others and the fast-paced and high stakes context of sport were key themes that inhibited athletes' use of self-compassion. The inherent culture of sport and athletes' personal choices to use or not use self-compassion were identified as relevant themes when considering how sport environments both enable and restrict self-compassion, suggesting that there may be overarching social norms in sport as well as athlete-specific tendencies that nurture or deter the use of self-compassion. Overall, these findings provide evidence for particular sport contexts and factors that might be important to focus on in future self-compassion research, and possible ways to advance applied work by creating sport environments that facilitate the use of self-compassion.

Our research contributes to the literature focused on self-compassion in sport by considering a variety of athlete and contextual factors that have previously been overlooked or studied in isolation. To the best of our knowledge, our research is among the first to examine differences in self-compassion between athlete genders, competition levels, and a variety of sport contexts (i.e., team versus individual, aesthetic versus non-aesthetic) within the same study. Lower self-compassion among aesthetic sport athletes compared to non-aesthetic sport athletes is an important finding, as it adds depth to previous research findings that athletes in aesthetic sports have higher incidences of anxiety disorder, depression, and disordered eating than athletes in non-aesthetic sports (Schaal et al., 2011; Sundgot-Borgen, 1994). Aesthetic sports such as figure skating, synchronized swimming, cheerleading, and gymnastics typically include evaluations based on judges' opinions, and success in competition often calls for ultra-lean and/or a specific weight in these "appearance oriented" sports (Krentz & Warschburger, 2011; Sundgot-Borgen, 1994). With evidence that athletes in aesthetic sports have lower levels of self-compassion, our research underscores the need for heightened attention to develop these athletes' skills and resources to manage their unique sport experiences in adaptive ways.

Athletes competing locally had higher self-compassion levels than athletes competing provincially, nationally, and internationally. This finding contradicts research by Walton et al. (2020) who found no difference in self-compassion across competition levels. Our competition categorization approach differed from that of Walton et al., who grouped athletes into two groups (i.e., recreational or competitive). As there are more complex and nuanced ways of defining athlete status (Swann et al., 2015), we distinguished between five competition levels and found that self-compassion is lower among athletes competing at higher levels than those competing locally. This is concerning as high performance athletes experience stressors more frequently, at a higher intensity, and for a longer duration than those competing at lower levels (Arnold et al., 2016), making resources such as self-compassion all the more relevant. Though results in the literature are equivocal (see Gorczynski et al., 2017), some researchers have found that elite athletes have a higher risk of mental health challenges, such as depression and anxiety (Rice et al., 2016). Our research provides complimentary evidence that athletes at higher competition levels may be at risk for having, or using, fewer skills and resources to manage their demanding sport experiences.

Taken together, our results suggest that athletes in aesthetic sports and athletes competing at levels higher than local may be important sport groups to deliver targeted self-compassion interventions. An important caveat to our

research, however, is that athletes competing at the regional level did not have (significantly) lower self-compassion levels than athletes competing at the local level. While the regional athletes trend lower in their self-compassion levels compared to local athletes, the pattern of results suggests a possible spike in self-compassion levels when competing at this level. It will be important for researchers to investigate this phenomenon more fully, perhaps through in-depth qualitative methods, to better understand the differences in self-compassion across competition levels. Moreover, although our results identified differences in self-compassion levels across some competition levels, additional research is needed to investigate clinically relevant differences. Identifying the point at which a minimal increase or decrease in self-compassion is meaningful (i.e., the athlete perceives it as meaningfully important) will be useful for applied research.

No differences in self-compassion were found between women athletes and men athletes in our study. While Amemiya and Sakairi (2020) found that the women athletes in their study had lower self-compassion levels than men athletes, their study was limited by disproportionate gender representation (i.e., 126 men athletes compared to 25 women athletes). Our study included more equal representation of women and men athletes, and we found no differences in self-compassion levels between genders. This finding was unexpected as, outside of the sport context, meta-analyses by Yarnell et al. (2015, 2019) identified lower self-compassion levels among women compared to men. When considering individual research studies, however, findings on gender differences in self-compassion have been inconsistent (Yarnell et al., 2015). As such, Yarnell et al. (2019) concluded that the small effect size observed in their meta-analysis between women's and men's self-compassion levels likely suggests that most variance in self-compassion is not between but within gender groups. Given similar self-compassion levels observed for women and men athletes in the current study, our results support the call for researchers to expand their focus beyond women athletes and put concerted effort in exploring self-compassion as a resource for men athletes (Mosewich et al., 2019a; Reis et al., 2019).

In addition to finding no differences in self-compassion levels between women and men athletes, no differences were found between athletes competing in teams versus those competing in individual sports. In their examination of differences in self-compassion between female martial arts athletes, female athletes who practice handball, or female athletes who practice individual sports, Jansen and Pietsch (2020) suggested that the team versus individual sport aspect may be less relevant than other factors, such as whether athletes participate in competitions. Our results provide some support for

Jansen and Pietsch's proposition, as there were some differences in self-compassion levels between athletes at differing levels of competition, though we did not include a sample of non-competing athletes. Given similar self-compassion levels observed between athletes in both team sports and individual sports in the current study, future self-compassion research should not be limited to athletes of particular team/individual sport contexts.

Mosewich et al. (2019a) highlighted the need to identify personal and environmental factors that contribute to, as well as thwart, athletes' development of self-compassion. Findings from our research, in particular the most salient themes generated from the open-ended questions, directly inform this gap in the literature. Creating sport environments where athletes feel safe to be open and honest and are encouraged to do their best was identified as important. Participants indicated that open communication and having authentic support for and from one another (i.e., coaches, teammates) regardless of success or failure facilitates athletes' use of self-compassion. These findings align with the components of self-compassion. A positive, supportive, and welcoming sport environment would likely nurture kindness and understanding (i.e., self-kindness) over harsh criticism and scrutiny. Openly supporting each other through successes and failures is an extension of acknowledging our shared humanity and the adversity we all experience (i.e., common humanity). Lastly, not dwelling on negative events in order to do one's best requires taking a balanced approach to one's experiences (i.e., mindfulness). Creating safe spaces is particularly important for athletes' mental health, as the stigma around helpseeking has been identified as a barrier preventing elite athletes from seeking help (Poucher et al., 2019). It is important for athletes to have supportive relationships and environments where they feel safe to disclose personal or vulnerable information (Thrower et al., 2021).

Alternatively, our findings provide important considerations about environmental factors to overcome that are viewed as restricting athletes' use of self-compassion. Participants indicated that negativity from coaches and teammates can affect their likelihood to use self-compassion. Creating environments that mitigate excessive negativity can likely be harnessed through psycho-behavioural education and training. The perception of a "high stakes" context was also identified as restricting the use of self-compassion. These findings appear to link with some of the counter components of self-compassion, namely self-judgment and overidentification. Being exposed to a constant beratement of negativity is likely to impact the criticism and judgment athletes direct at themselves (i.e., self-judgment). Sport contexts that are described as "high stakes" environments may make it difficult for athletes to have a balanced view of a situation, and may make it difficult to consider

the bigger picture or anything other than the high pressure situation (i.e., overidentification). Having high levels of obsessive passion (i.e., ego investment, high pressure, defensive mode of functioning) predicts fear of self-compassion (Schellenberg et al., 2016), suggesting that environments that emulate obsessive passion are likely counter to self-compassion. Though passion was not explored in our study, modifying features of the environment to decrease obsessive passion might be a worthwhile pursuit.

Coaches and teammates play a role in the likelihood of athletes' adopting self-compassion (Crozier et al., 2019; Frentz et al., 2019; Ingstrup et al., 2017). While coaches and teammates were identified as encouraging athletes' use of self-compassion in the current study, they were also identified as potentially limiting its use. As such, we support ongoing recommendations for enhanced education and training opportunities for teams, coaches, and sport practitioners to create environments that best support athletes (Bissett et al., 2020; Poucher et al., 2020). A promising indicator in our data was the higher ratings of the sport environment encouraging, rather than discouraging, athletes' use of self-compassion. However, the themes reflecting ways sport contexts can restrict athletes' use of self-compassion point to needed improvement to create self-compassionate sport environments. Programs could be targeted at coaches to create safe, supportive, and positive environments for athletes. Team building exercises could be created that highlight the risks of excessive negativity (from coaches and teammates) on athletes' performance and wellbeing. Integrating specific self-compassion strategies that have been used in previous intervention research would be ideal (e.g., body scans, compassionate imagery, compassionate writing, mindful breathing, meditation, and psychoeducation; Bluth et al. 2016; Carraça et al., 2018, 2019). As an example, creating self-compassion phrases or cues could be developed to use during a fast-paced or high stakes sport situation. These cues may bolster striving for excellence while supporting doing one's best in sport environments.

Limitations

We did not align the timing of data collection across athletes' competitive seasons (e.g., pre-season, mid-season, post-season), which is a potential limitation of our study. Given that participants would have been at varying points in their seasons, responses to survey questions may have differed for reasons other than individual self-compassion levels, and/or athletes' recollections of their sport environments as enabling or restricting self-compassion may have been impacted. Another limitation is the unequal sample sizes

across the various sub-groups of participants. Although all statistical assumptions were met, larger and more equal samples from each sub-group are needed to replicate our results and increase confidence in generalizability. Finally, given that we removed 36 participants from the data set during data cleaning (based on a priori protocols) we may have been underpowered in our hypothesis testing, which is a noted limitation of our study.

Future Directions

An important consideration for future research is to enhance athlete representation within our studies (Mosewich et al., 2019a). Our demographics questionnaire included five response options for self-reporting gender (i.e., woman, man, non-binary, transgender woman, transgender man), as well as an option to self-describe. Other than three participants electing to not report their gender, all participants self-identified as binary woman or man. Given self-compassion's role as a resource for difficult sport experiences, it may prove particularly relevant for non-binary gender or transgender athletes who experience unique demands in sport. Similarly, more research is needed with ethnically diverse samples and athletes with varying levels of ability (e.g., parasport athletes) to explore the potential usefulness of self-compassion for athletes with diverse sport experiences. Partnering with equity, diversity, and inclusion specialists for effective ways to improve representation in our research may be fruitful. Researchers might also examine athletes' self-compassion within a specific sport, rather than a range of sports, to disentangle the levels and use of self-compassion across competition levels within specific sports. This line of inquiry may further inform needed intervention for more targeted groups.

Conclusion

Our study advances the notion that the development and use of self-compassion is likely a highly individualistic pursuit (Frentz et al., 2019; Mosewich et al., 2019a) that is impacted by each athlete's unique sport environment. Athletes within aesthetic sport contexts and athletes competing at higher competition levels may be at risk for lower self-compassion. Our research informs future research and applied work in ecologically valid ways, as participants shared real life examples of how self-compassion is effectively encouraged in their sport contexts. Potential ways to nurture self-compassion in sport contexts include creating safe spaces and focusing on effort over outcome, as well as mitigating maladaptive negativity and undue extreme pres-

sure. Future research is needed to expand athlete representation so as to not limit generalizability and enhance the sport experiences of diverse athletes.

REFERENCES

- Amemiya, R., & Sakairi, Y. (2020). The role of self-compassion in athlete mindfulness and burnout: Examination of the effects of gender differences. *Personality and Individual Differences*, 166. https://doi.org/10.1016/j.paid.2020.110167
- Arnold, R., Fletcher, D., & Daniles, K. (2016). Demographic differences in sport performers' experiences of organizational stressors. *Scandinavian Journal of Medicine & Science in Sports*, 26, 348-358. https://doi.org/10.1111/sms.12439
- Baker, J., Yardley, J., & Côté, J. (2003). Coach behaviors and athlete satisfaction in team and individual sports. *International Journal of Sport Psychology*, 34, 226-239.
- Bissett, J. E., Kroshus, E., & Hebard, S. (2020). Determining the role of sport coaches in promoting athlete mental health: A narrative review and Delphi approach. *BMJ open Sport & Exercise Medicine*, 6. http://dx.doi.org/10.1136/bmjsem-2019-000676
- Bluth, K., Gaylord, S. A., Campo, R. A., Mullarkey, M. C., & Hobbs, L. (2016). Making friends with yourself: A mixed methods pilot study of a mindful self-compassion program for adolescents. *Mindfulness*, 7, 479-492.
- Bruner, M. W., Munroe-Chandler, K. J., & Spink, K. S. (2008). Entry into elite sport: A preliminary investigation into the transition experiences of rookie athletes. *Journal of Applied Sport Psychology*, 20, 236–252. https://doi.org/10.1080/10413200701867745
- Carraça, B., Serpa, S., Rosado, A., & Guerrero, J. P. (2019). A pilot study of a mindfulness-based program (MBSoccerP): The potential role of mindfulness, self-compassion and psychological flexibility on flow and elite performance in soccer athletes. Revista Iberoamericana de psicologia del ejercicio y el deporte, 14, 34-40.
- Carraça, B., Serpa, S., Rosado, A., & Palmi, J. (2018). The Mindfulness Based Soccer Program (MBSoccerP): Effects on elite athletes. *Cuadernos de Psicología del Deporte, 18,* 62-85.
- Chelladurai, P., & Saleh, S. D. (1978). Preferred leadership in sports. Canadian Journal of Applied Sport Sciences, 3, 85-92.
- Cohen J. (1988). Statistical power analysis for the behavioral sciences. Routledge.
- Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). Sage.
- Crocker, P. R. E., Tamminen, K. A., & Gaudreau, P. (2015). Coping in sport. In S. Hanton & S. Mellalieu (Eds.), *Contemporary advances in sport psychology: A review* (pp. 28-67). New York, NY: Routledge.
- Crozier, A. J., Mosewich, A. D., & Ferguson, L. J. (2019). The company we keep: Exploring the relationship between perceived teammate self-compassion and athlete self-compassion. *Psychology of Sport and Exercise*, 40, 152-155. https://doi.org/10.1016/j.psychsport.2018.10.005
- DeFreese, J. D., & Smith, A. L. (2013). Teammate social support, burnout, and self-determined motivation in collegiate athletes. *Psychology of Sport and Exercise, 14, 258-265*. https://doi.org/10.1016/j.psychsport.2012.10.009
- Eke, A. O., Adam, M. E. K., Kowalski, K. C., & Ferguson, L. J. (2020). Narratives of adolescent women athletes' body self-compassion, performance and emotional well-being. *Qualitative Research in Sport, Exercise and Health*, 12, 175-191. doi:10.1080/2159676X.2019.1628805
- Elo S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62, 107-115.

- Evans, M. B., Eys, M. A., & Bruner, M. W. (2012). Seeing the "we" in "me" sports: The need to consider individual sport team environments. *Canadian Psychology/Psychologie Canadienne*, 53(4), 301-308.
- Ferguson, L. J., Kowalski, K. C., Mack, D. E., & Sabiston, C. M. (2014). Exploring self-compassion and eudaimonic well-being in young women athletes. *Journal of Sport & Exercise Psychology*, 36, 203-216. https://doi.org/10.1123/jsep.2013-0096
- Ferguson, L. J., Kowalski, K. C., Mack, D. E., & Sabiston, C. M. (2015). Self-compassion and eudaimonic well-being during emotionally difficult times in sport. *Journal of Happiness Studies*, 16(5), 1263-1280. https://doi.org/10.1007/s10902-014-9558-8
- Frentz, D. M., McHugh, T.-L. F., & Mosewich, A. D. (2019). Athletes' experiences of shifting from self-critical to self-compassionate approaches within high performance sport. *Journal of Applied Sport Psychology*. https://doi.org/10.1080/10413200.2019.1608332
- Gorczynski, P. F., Coyle, M., & Gibson, K. (2017). Depressive symptoms in high-performance athletes and non-athletes: A comparative meta-analysis. *British Journal of Sports Medicine*, *51*, 1348-1354. http://dx.doi.org/10.1136/bjsports-2016-096455
- Huysmans, Z., & Clement, D. (2017). A preliminary exploration of the application of self-compassion within the context of sport injury. *Journal of Sport & Exercise Psychology*, 39, 56-66.
- Ingstrup, M. S., Mosewich, A. D., & Holt, N. (2017). The development of self-compassion among women varsity athletes. *The Sport Psychologist*, 31, 317-331. https://doi.org/10.1123/tsp.2016-0147
- Jansen, P., Hoja, S., & Menenghetti, C. (2021). Does repetitive thinking mediate the relationship between self-compassion and competition anxiety in athletes? *Cogent Psychology, 8,* 1909243. https://doi.org/10.1080/23311908.2021.1909243
- Jansen, P., & Pietsch, S. (2020). Enhanced self-compassion in female martial arts athletes. *Journal of Martial Arts Research*, 3. https://doi.org/10.15495/ojs_25678221_33_175
- Jeon, H., Lee, K., & Kwon, S. (2016). Investigation of the structural relationships between social support, self-compassion, and subjective well-being in Korean elite student athletes. *Psychological Reports*, 119, 39-54. https://doi.org/10.1177/0033294116658226
- Killham, M. E., Mosewich, A. D., Mack, D. E., Gunnell, K. E., & Ferguson, L. J. (2018). Women athletes' self-compassion, self-criticism, and perceived sport performance. *Sport, Exercise, and Performance Psychology*, 7, 297-307. http://dx.doi.org/10.1037/spy0000127
- Kowalski, K. C., McHugh, T.-L. F., Sabiston, C. M., & Ferguson, L. J. (2018). *Research Methods in Kinesiology*. Oxford University Press Canada.
- Krane, V., Waldron, J., Stiles-Shipley, J. A., & Michalenok, J. (2001). Relationships among body satisfaction, social physique anxiety and eating behaviors in female athletes and exercisers. *Journal of Sport Behavior*, 24, 247-261.
- Krentz, E. M., & Warschburger, P. (2011). Sports-related correlates of disordered eating in aesthetic sports. *Psychology of Sport and Exercise*, 12, 375-382. https://doi.org/10.1016/j.psychsport.2011.03.004
- Lizmore, M. R., Dunn, J. G., & Causgrove Dunn, J. (2017). Perfectionistic strivings, perfectionistic concerns, and reactions to poor personal performances among intercollegiate athletes. *Psychology of Sport and Exercise*, 33, 75-84. https://doi.org/10.1016/j.psychsport.2017.07.010
- Lunde, C. & Gattario, K. H. (2017). Performance or appearance? Young female sport participants' body negotiations. *Body Image*, 21, 81-89. https://doi.org/10.1016/j.bodyim.2017.03.001
- Mayolas-Pi, C., Sitko, S., Oviedo-Caro, M. A., Bueno-Antequera, J., Reverter-Masià, J., Francín-Gallego, M., Sarasa-Oliván, F. J., & Legaz-Arrese, A. (2021). Influence of organised sports practice during adolescence on health of adult women with special emphasis on

- participation in aesthetic sports. European Journal of Sport Science, 21, 107-117. https://doi.org/10.1080/17461391.2020.1736180
- Mosewich, A. D. (2020). Self-compassion in sport and exercise. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (4th ed.). Wiley-Blackwell.
- Mosewich, A. D., Crocker, P. R. E., Kowalski, K. C., & DeLongis, A. (2013). Applying self-compassion in sport: An intervention with women athletes. *Journal of Sport & Exercise Psychology*, 35, 514-524.
- Mosewich, A. D., Ferguson, L. J., McHugh, T. L. F., & Kowalski, K. C. (2019a). Enhancing capacity: Integrating self-compassion in sport. *Journal of Sport Psychology in Action*, 1-9. https://doi.org/10.1080/21520704.2018.1557774
- Mosewich, A. D., Kowalski, K. C., Sabiston, C. M., Sedgwick, W. A., & Tracy, J. L. (2011). Self-compassion: A potential resource for young women athletes. *Journal of Sport & Exercise Psychology*, 33, 103-123.
- Mosewich, A. D., Sabiston, C. M., Kowalski, K. C., Gaudreau, P., & Crocker, P. R. (2019b). Self-compassion in the stress process in women athletes. *The Sport Psychologist*, 33(1), 23-34. https://doi.org/10.1123/tsp.2017-0094
- Mosewich, A. D., Vangool, A. B., Kowalski, K. C., & McHugh, T-L. F. (2009). Exploring track and field athletes' meanings of muscularity. *Journal of Applied Sport Psychology*, 21, 99-115. https://doi.org/10.1080/10413200802575742
- Neff, K. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-101. https://doi.org/10.1080/15298860309032
- Neff, K. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*, 223-250.
- Neff, K., & Germer, C. (2013). A pilot study and randomized controlled trial of the Mindful Self-Compassion program. *Journal of Clinical Psychology*, 69, 28-44.
- Neff, K., & Germer, C. (2018). The mindful self-compassion workbook: A proven way to accept yourself, build inner strength, and thrive. Guilford.
- Nixdorf, I., Frank, R., & Beckmann, J. (2016). Comparison of athletes' proneness to depressive symptoms in individual and team sports: Research on psychological mediators in junior elite athletes. Frontiers in Psychology, 7, 1-8. https://doi.org/10.3389/fpsyg.2016.01782
- Paixão, C., Oliveira, S., & Ferreira, C. (2020). A comprehensive model of disordered eating among aesthetic athletic girls: Exploring the role of body image-related cognitive fusion and perfectionistic self- presentation. *Current Psychology*. https://doi.org/10.1007/ s12144-020-01142-z
- Poucher, Z. A., Bissett, J. E., & Tamminen, K. A. (2020). Development of a webinar for sport coaches: Suggested best practices for supporting athletes. *Journal of Sport Psychology in Action*. https://doi.org/10.1080/21520704.2020.1770909
- Poucher, Z. A., Tamminen, K. A., Kerr, G., & Cairney, J. (2019). A commentary on mental health research in elite sport. *Journal of Applied Sport Psychology*. https://doi.org/10.1080/10413200.2019.1668496
- Reis, N. A., Kowalski, K. C., Ferguson, L. J., Sabiston, C. M., Sedgwick, W. A., & Crocker, P. R.E. (2015). Self-compassion and women athletes' responses to emotionally difficult sport situations: An evaluation of a brief induction. *Psychology of Sport and Exercise*, 16, 18-25. http://dx.doi.org/10.1016/j.psychsport.2014.08.011
- Reis, N. A., Kowalski, K. C., Mosewich, A. D., & Ferguson, L. J. (2019). Exploring self-compassion and versions of masculinity in men athletes. *Journal of Sport & Exercise Psychology*, 41, 368-379.
- Rice, S. M., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The mental health of elite athletes: A narrative systematic review. *Sports Medicine*, 46, 1333-1353.
- Röthlin, P., & Leiggener, R. (2021). Self-compassion to decrease performance anxiety in

- climbers: A randomized control trial. Current Issues in Sport Science, 6. https://doi.org/10.36950/2021ciss004
- Schaal, K., Tafflet, M., Nassif, H., Thibault, V., Pichard, C. Alcotted, M., ...Toussaint, J.-F. (2011). Psychological balance in high level athletes: Gender-based differences and sport-specific patterns. *Psychopathology and High Level Sport*, 6. https://doi.org/10.1371/journal.pone.0019007
- Schellenberg, B. J. I., Bailis, D. S., & Mosewich, A. D. (2016). You have passion, but do you have self-compassion? Harmonious passion, obsessive passion, and responses to passion-related failure. *Personality and Individual Differences*, 99, 278-285. https://doi.org/10.1016/j.paid.2016.05.003
- Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, 11, 101-121. https://doi.org/10.1080/1750984X.2017.1317357
- Sundgot-Borgen, J. (1994). Risk and trigger factors for the development of eating disorders in female elite athletes. *Medicine and Science in Sports and Exercise*, 26, 414-419.
- Swann, C., Moran, A., & Piggot, D. (2015). Defining elite athletes: Issues in the study of expert performance in sport psychology. *Psychology of Sport and Exercise*, 16, 3-14. http://dx.doi.org/10.1016/j.psychsport.2014.07.004
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Boston, MA: Pearson.
- Thrower, S. N., Harwood, C. G., & Neely, K. C. (2021). Stress-related growth within youth sport: The parent-child relationship. In R. Wadey, M. Day, & K. Howells (Eds.), *Growth following adversity in sport: A mechanism to positive change* (pp. 120-130). Routledge.
- Vincent, W. J., & Weir, J. P. (2012). Statistics in kinesiology (4th ed.). Champaign, IL: Human Kinetics.
- Walton, C. C., Baranoff J., Gilbert, P., & Kirby, J. (2020). Self-compassion, social rank, and psychological distress in athletes of varying competitive levels. *Psychology of Sport and Exercise*. https://doi.org/10.1016/j.psychsport.2020.101733
- Wasylkiw, L., & Clairo, J. (2018). Help seeking in men: When masculinity and self-compassion collide. Psychology of Men & Masculinity, 19, 232-242. https://doi.org/10.1037/men0000086
- Whaley, D. E., & Krane, V. (2011). Now that we all agree, let's talk epistemology: A commentary on the invited articles. *Qualitative Research in Sport, Exercise and Health, 3,* 394-403. https://doi.org/10.1080/2159676X.2011.607186
- Yarnell, L. M., Neff, K. D., Davidson, O. A., & Mullarkey, M. (2019). Gender differences in self-compassion: Examining the role of gender role orientation. *Mindfulness*, 10, 1136-1152. https://doi.org/10.1007/s12671-018-1066-1
- Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in self-compassion. Self and Identity, 14, 499-520. https://doi.org/10.1080/15298868.2015.1029966