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Women Athletes' Self-Compassion, Self-Criticism, and Perceived Sport Performance

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Many difficult and painful sport experiences for young women athletes are at least partially due to their harsh self-criticism and negative performance evaluations. One potential resource for young women athletes to manage these experiences is self-compassion, a healthy self-attitude premised on being kind and understanding toward oneself during times of pain and failure. The purpose of this study was to explore if self-compassion was related to sport performance and if self-compassion accounts unique variance beyond self-criticism in women athletes' perceived sport performance. Women athletes ($N = 82$, $M_{age} = 18.77$ years) from a variety of sports and competition levels completed measures of perceived sport performance, self-compassion, and self-criticism in sport around a scheduled competition. Self-compassion was negatively correlated with self-criticism, $r = -.61$, $p < .001$ and positively correlated with perceived sport performance, $r = .29$, $p < .01$. Further, self-criticism was not related to women athletes' perceived sport performance. Hierarchical regression analyses revealed that self-compassion contributed 5.4% unique variance beyond self-criticism in women athletes' perceived sport performance. The results of this research suggest that extending compassion toward the self may be important for women athletes' sport performance, whereas self-criticism does not play a role in perceived sport performance.

Keywords: female athletes, sport participation, competition, sport psychology, self-attitudes

Sport participation has the potential to promote positive experiences for young women through the satisfaction of psychological needs (e.g., competence, relatedness, and autonomy), promotion of positive physiological adaptations to the cardiovascular system and musculoskeletal health, as well as the development of interpersonal and leadership skills (e.g., Bruner et al., 2017; Crocker, 2016; Eime, Young, Harvey, Charity, & Payne, 2013; Forcier et al., 2006; Gunnell, Crocker, Mack, Wilson, & Zumbo, 2014). Although there are many possible advantages related to sport participation, there are also several challenges in sport contexts that could detract from women athletes' experiences. For instance, a common challenge in sport contexts is that athletes and coaches focus on excessive performance expectations and evalua-

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tions that can be challenging to manage (Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011; Weinberg & Gould, 2011). Further, difficulties in sport that women athletes might face are often met with constant and sometimes harsh self-scrutiny related to self-criticism (Kowalski & Duckham, 2014). Women athletes may face further challenges related to self-criticism such as fear of failure, perfectionism, body-related concerns, compulsive exercise, chronic injury, and anxiety (Bartholomew et al., 2011; Gordon & LeBoff, 2015; Mosewich, Crocker, & Kowalski, 2014; Nicholls, Levy, Carson, Thompson, & Perry, 2016; Tarasoff, Ferguson, & Kowalski, 2017).

Self-compassion has been proposed as a tool or resource for women athletes during challenging times in sport (Mosewich, Kowalski, Sabiston, Sedgwick, & Tracy, 2011; Reis et al., 2015). Informed by positive psychology and Eastern philosophy, self-compassion is a kind, connected, and clear-sighted self-attitude that is based on self-kindness (i.e., being kind and understanding toward oneself, rather than being overly self-critical or harsh), common humanity (i.e., feeling connected to others based on common or shared experiences, rather than feeling isolated), and mindfulness (i.e., being able to hold experiences in a balanced perspective without becoming overwhelmed or consumed by a specific event or experience; Neff, 2003a, 2003b, 2011). Moreover, self-compassion is described as "being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness" (Neff, 2003b, p. 87). In a general population sample, self-compassion has been suggested to play a role in motivation through the acceptance of personal failures and wanting to improve (Breines & Chen, 2012). Further, self-compassionate motivation (accepting failure and wanting to improve) has been related to self-improvement performance measures such as wanting to make amends following a moral transgression, studying for a challenging test after a failed first attempt, and preferring for upward social comparison in light of perceived personal weaknesses, and increased motivation to work on these identified weaknesses (Breines & Chen, 2012).

Using cross-sectional research designs, researchers have highlighted that self-compassion can be a valuable tool or resource for women athletes during difficult or challenging sport experiences (Ferguson, Kowalski, Mack, & Sabiston, 2014, 2015; Mosewich, Crocker, Kowalski, & Delongis, 2013; Mosewich et al., 2011; Reis et al., 2015; Sutherland et al., 2014). Specifically, in sport contexts, self-compassion has been negatively associated with feelings of shame, social physique anxiety, objectified body consciousness, fear of failure, fear of negative evaluation, self-criticism, state rumination, and concern over mistakes (Mosewich et al., 2011, 2013). Extending these findings, Mosewich et al. (2013) examined the implications of a brief self-compassion intervention with self-critical women athletes using a randomized controlled design. Athletes in the self-compassion intervention group increased self-compassion scores while reducing self-criticism, rumination, and concern over mistakes as compared with those in the attention control group. Therefore, self-compassion shows promise as a tool to help manage self-criticism and negative events in sport for women athletes (Mosewich et al., 2013). Recently, researchers have also proposed that self-compassion might promote positive experiences such as eudaimonic well-being, body appreciation, and intuitive eating in sport for women athletes (Ferguson et al., 2014, 2015; Killham, 2014).

Despite the apparent advantages of self-compassion for women athletes, it is important to note that through qualitative methods, researchers have highlighted that some women athletes are hesitant to embrace self-compassion in sport, stating that self-compassion might lead to complacency or settling for mediocrity in sport (Ferguson et al., 2015; Sutherland et al., 2014). Moreover, women athletes in these studies were apprehensive about being self-compassionate in sport because they believed that self-criticism helped them achieve their performance goals and reach their athletic potential (Ferguson et al., 2015; Sutherland et al., 2014). Researchers skeptical of self-compassion have also suggested that self-compassion may curtail self-criticism and reductions in reparative behaviors following a mistake (Baker & McNulty, 2011; Exline, Root, Yadavalli, Martin,

& Fisher, 2011). From a conceptual standpoint, self-criticism is based on maladaptive thought patterns alongside unrealistic self-expectations and is related to self-oriented perfectionism, anxiety, rumination, and even sport burnout (Kowalski & Duckham, 2014), which could negatively impact sport performance rather than promote it. The potential impact of self-criticism on athletes' well-being, emphasis placed on self-criticism for sport performance, and potential role of self-compassion in athletes' sport experiences necessitate further examination, especially because it is unknown if self-compassion or self-criticism is related to athletes' perceived sport performance.

Within sport contexts, performance is a key indicator of athletes' progress and success and is often a source for evaluation. Outside of sport contexts, researchers have found that higher self-compassion is related to more accurate retrospective self-evaluations of performance (Leary, Tate, Adams, Batts Allen, & Hancock, 2007). Specifically, Leary et al. (2007) found that individuals' evaluations of their observed performance on an awkward task were different based on their self-compassion levels. In this study, participants were video recorded while they completed a task, which was then evaluated as either awkward, competent, or confident by individuals, a low self-compassion participant, and a high self-compassion participant. Individuals with lower self-compassion had more negative self-evaluations and distressed feelings (embarrassment, irritability, sadness, and nervousness), and they underevaluated their performance when watching videos of themselves completing a task compared with the ratings from other participants, whereas individuals with higher self-compassion evaluated their performance similar to the evaluations made by other observers (Leary et al., 2007). Self-compassion has also been found to be indirectly related to academic performance (grade point average) through perceived competence, fear of failure, mastery goals, and approach/avoidance orientations (Neff, Hsieh, & Dejitterat, 2005).

Despite its potential, little is known about *if* self-compassion might play a role in perceived sport performance, or even if self-compassion is related to perceived sport performance. Given the conceptual links between self-compassion and accuracy in self-evaluations (Leary et al., 2007) and between self-compassion, motivation, and test performance proposed by Breines and Chen (2012), it is possible that adopting a self-compassionate perspective in sport could promote athletes' perceived sport performance through mastery and self-improvement orientations. Further, due to the potential advantages of self-compassion for women athletes (Ferguson et al., 2014, 2015; Killham, 2014), it is important to contextualize and explore the self-compassion−performance relationship within sport.

The purpose of this study was to explore if self-compassion was related to sport performance and if self-compassion accounts unique variance beyond self-criticism in women athletes' perceived sport performance. This study was guided by previous research findings that women tend to score higher on self-criticism and lower on self-compassion measures than men (e.g., Mosewich et al., 2013; Neff, 2003b) and by Leary et al. (2007), who identified that self-compassion was related to more accurate performance evaluations. Further, within sport contexts, it is relevant to explore the connections between perceived sport performance, self-compassion, and self-criticism as researchers have identified self-compassion as a valuable tool, whereas women athletes have expressed hesitation and the belief that self-criticism is necessary to reach their potential in sport. In this study, three hypotheses were tested: Hypothesis 1 was that a positive relationship exists between self-compassion and perceived sport performance, Hypothesis 2 was that self-criticism is negatively related with both self-compassion and perceived sport performance, and Hypothesis 3 was that precompetition self-compassion predicts unique variance beyond self-criticism in women athletes' perceived sport performance.

The present study contributes to the existing sport and self-compassion literature through the application of a two time point study design with precompetition and postcompetition data collection. Cross-sectional study designs are often applied in self-compassion research, and this is particularly true with self-compassion research in sport, exercise, and physical activity settings (Ferguson et al., 2014; Magnus, Kow-

alski, & McHugh, 2010; Tarasoff et al., 2017); therefore, the multiple time point design used in the current study adds important value to the growing body of literature on self-compassion in sport. Further, self-compassion has not only been described as a relatively stable construct (Neff, 2003a) but has also been shown to change after intervention (e.g., Mosewich et al., 2013). The two time point design in the current study allowed for: (a) examining the stability of the self-compassion construct in the sport domain; (b) examining the relationships between precompetition self-compassion and self-criticism with postcompetition perceived sport performance; and (c) exploring whether precompetition self-compassion accounts for unique variance in postcompetition perceived sport performance.

Method

This was a self-report survey-based study with two time points: precompetition and postcompetition. After obtaining institutional ethical approval, coaches of women's sports associated with the provincial sport organization in Midwestern Canada were contacted and provided with information about the study. Coaches who expressed interest in inviting their athletes to participate in the study scheduled two data-collection time points around the timing of an upcoming competition. Participants completed a survey before and after a regular season competition; all data-collection time points were scheduled within 1 to 5 days of the scheduled competition (typically 2 to 3 days pre/postcompetition).

Data were collected in person at team meetings, practices, or exhibition competitions. At Time 1, the study was introduced to the athletes and informed consent was obtained. Questionnaire packages were distributed at both time points. At Time 1, athletes completed the demographic survey and measures of self-compassion and self-criticism, whereas at Time 2, athletes completed measures of self-compassion and perceived sport performance. To thank athletes for their participation in the study, each athlete selected a local sport and/or women's charity in which a $5.00 anonymous donation was made on their behalf.

Participants

The participants in this study were 82 women athletes of 16 to 24 years of age (M = 18.77 years, SD = 2.02 years). The women primarily self-identified as white (98%). Participants' self-reported height (M = 170.15 cm, SD = 8.16 cm) and weight (M = 63.66 kg, SD = 8.99 kg) were used to calculate the body mass index, which ranged from 14.29 to 25.07 kg/m^2 (M = 18.66 kg/m^2, SD = 2.05 kg/m^2). The athletes in this sample were competing in a variety of sports (i.e., basketball [12], cross-country [3], fencing [4], figure skating [1], hockey [35], ringette [5], volleyball [16], and wrestling [6]) and were competing at a range of competition levels (i.e., local [3], provincial [18], regional [14], national [45], and international [2]). Further, the sample size exceeded the recommended sample minimum of five participants per variable for hypothesis testing (Tabachnick & Fidell, 2013).

Measures

Demographics. Information regarding participants' age, height, weight, ethnicity, and sport participation was collected.

Self-compassion. An adapted athlete version of the Self-Compassion Scale (SCS-AV) was used to measure participants' self-compassion in sport. The original 26-item Self-Compassion Scale (SCS) was developed by Neff (2003b) and consists of six subscales, which together represent self-compassion: self-kindness (five items), self-judgment (five items), mindfulness (four items), overidentification (four items), common humanity (four items), and isolation (four items). Response options to each item range from 1 (*almost never*) to 5 (*almost always*). A mean score is calculated by first reverse coding negative items, with higher scores indicative of greater self-compassion (Neff, 2003b). Internal consistency values for the composite score of the original measure range from α = .73 to α = .94 in university undergraduate samples (Leary et al., 2007; Neff, 2003b, 2005), and from α = .82 to α = .93 in samples of women athletes (Ferguson et al., 2014, 2015; Killham, 2014; Mosewich et al., 2011; Reis et al., 2015).

The SCS-AV is a slightly modified version of the SCS to include the language that is specific

to the sport context, which shifts the measure to be context specific rather than a general measure of self-compassion. Modifications included specifying *athletes* instead of *people,* and *sport* instead of *in general.* The number of items per subscale, number of total scale items, general content of each item, and the scoring procedure remained unchanged between the original SCS and the SCS-AV. The intent of these minor changes was to orient athletes to think about and respond to each item based on how they treat themselves specifically in sport rather than in general. 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"), Overidentification (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"; all SCS-AV items available upon request).

Perceived sport performance. The seven-item Game Performance Assessment Instrument (GPAI) measures game performance behaviors, tactical understanding, and the athlete's ability to apply tactical skills (Oslin, Mitchell, & Griffin, 1998). Responses to each item range from 1 (*very weak performance*) to 5 (*very effective performance*). The GPAI has been used to measure physical activity performance in a variety of contexts, including physical education (Memmert & Harvey, 2008) and rugby (Pope & Wilson, 2015). The GPAI was used in the current study to assess athletes' perceived sport performance after competition. The athletes were instructed to respond to the GPAI items based on their performance in their most recent competition (e.g., "I made appropriate choices about what to do during competition"). Mean GPAI scores were calculated for data analysis. Higher mean GPAI scores reflect higher or more positively perceived sport performance. Evidence for the validity (Oslin et al., 1998; Pope & Wilson, 2015) and test−retest reliability (Oslin et al., 1998) of GPAI scores have been reported.

Self-criticism. Athletes' self-criticism was assessed by an athlete version of a state self-criticism measure (SC-AV; Mosewich et al., 2013). The SC-AV is a seven-item measure adapted from the self-monitoring log developed by Gilbert and Procter (2006), which was originally designed to record individuals' self-critical thoughts and emotions. In the SC-AV, participants were asked to reflect on a salient negative event from the past week in their sport and then respond to each item (e.g., "How intrusive were your self-critical thoughts about a recent negative sport event?") on a scale from 1 (e.g., *not at all*) to 10 (e.g., *very intrusive*). After reverse coding the negatively phrased items, a mean SC-AV value for the seven items was calculated with higher mean scores, representing higher levels of self-criticism (Mosewich et al., 2013). Scores from the SC-AV have demonstrated evidence of internal consistency reliability with values reported between $\alpha = .86$ and $\alpha = .90$ for women athletes (Killham, 2014; Mosewich et al., 2013).

Data Analysis

The a priori cutoff for missing data was either two missing points in a subscale or missing 20% of total items on a measure. No athletes exceeded the missing data cutoffs (for subscales or total scales), and therefore no participants were removed before analysis. Missing data points (four points across four participants) were managed through within person mean replacement by scale (Tabachnick & Fidell, 2013). Further, the normality of the data was assessed through the evaluation of Skewness and Kurtosis for all measures. There were violations for the GPAI for Skewness (−3.79) and Kurtosis (5.47); however, there were no normality violations for the SCS-AV or SC-AV (Vincent & Weir, 2012). Negative Skewness values for the GPAI are not surprising, as the athletes' reported levels of competition would suggest that they would score well on the GPAI, which is an assessment of game performance behaviors, tactical understanding, ability to apply tactical skills, and to be continually improving sport-specific skills. Transformations (logarithmic) were made for the GPAI, and the analysis conclusions remained consistent with the original data set. Therefore, for practical and theoretical reasons, the original data were interpreted and are presented here.

Hypothesis testing. To test Hypothesis 1 (that a positive relationship would exist between self-compassion and perceived sport performance) and Hypothesis 2 (that self-criticism would be negatively related to both self-compassion and perceived sport performance), Pearson bivariate correlations were calculated across study variables to examine patterns of association. Further, to test Hypothesis 3 (that precompetition self-compassion would predict unique variance beyond self-criticism in women athletes' perceived sport performance), a hierarchical regression analysis was conducted with performance as the criterion variable: self-criticism was entered at Step 1 and precompetition self-compassion was entered at Step 2. Further, a test−retest correlation of the SCS-AV was conducted between Time 1 and Time 2, to evaluate the stability of the modified measure.

Results

Descriptive Statistics

The descriptive statistics and internal consistency scale reliabilities are reported in Table 1. Of note, the SCS-AV had an internal consistency of $\alpha = .85$ at Time 1 and $\alpha = .88$ at Time 2. Further, the test−retest correlation for the SCS-AV scores between Time 1 and Time 2 was noted $r = .81$, $p < .001$. These estimates of reliability highlight the relative stability of the SCS-AV and internal consistency values for the SCS-AV that are similar to values for the original SCS in women athlete samples.

Main Analyses

There was support for Hypothesis 1 as self-compassion was positively related to perceived sport performance (Table 2). Specifically, both Time 1 SCS-AV and Time 2 SCS-AV were positively correlated with GPAI ($r = .29$, $p = .005$, $r = .33$, $p = .001$, respectively).

There was support for the first part of Hypothesis 2 as self-criticism was negatively correlated with both Time 1 SCS-AV and Time 2 SCS-AV ($r = -.61$, $p < .001$, and $r = -.52$, $p < .001$, respectively). However, there was not support for the second part of Hypothesis 2 as self-criticism was not correlated with perceived sport performance, $r = -.17$, $p = .67$ (Table 2).

There was full support for Hypothesis 3 as self-compassion contributed unique variance beyond self-criticism in perceived sport performance (Table 3). Specifically, Time 1 SCS-AV contributed unique variance beyond SC-AV in the women athletes' GPAI scores (5.4%, $p < .05$). The total variance accounted for in the athletes' GPAI scores was 8.2% ($p < .05$). The effect size is classified as small (Cohen's R^2 effect size conventions: small effect = 1−5.9% variance) for the unique variance accounted for by self-compassion in the regression analysis.

Table 1
Descriptive Statistics and Scale Reliabilities

Measure	Items	Range	Mean (*SD*)	α
Time 1 SCS-AV	26	1–5	3.11 (0.44)	.85
Time 2 SCS-AV	26	1–5	3.01 (0.46)	.88
GPAI	7	1–5	3.63 (0.69)	.90
SC-AV	7	1–10	4.96 (1.69)	.86

Note. GPAI = Game Performance Assessment Instrument; SCS-AV = Self-Compassion Scale−Athlete Version; SC-AV = Self-Criticism−Athlete Version; *SD* = standard deviation; α = Cronbach's alpha.

Table 2
Self-Compassion, Perceived Sport Performance, and Self-Criticism Correlations

Measure	1	2	3
1. Time 1 SCS-AV	—		
2. Time 2 SCS-AV	.81**	—	
3. GPAI	.29*	.33*	—
4. SC-AV	−.61**	−.52**	−.17

Note. Degrees of freedom = 80. SCS-AV = Self-Compassion Scale−Athlete Version; GPAI = Game Performance Assessment Instrument; SC-AV = Self-Criticism−Athlete Version.
* $p < .01$. ** $p < .001$ (all one-tailed).

Discussion

The intent of this study was to explore self-compassion, self-criticism, and women athletes' perceived sport performance. The SCS was modified for a sport context, and the intent of measuring self-compassion before and after competition was to evaluate initial psychometric properties of the SCS-AV. The test−retest correlation was strong, and internal consistency values of the SCS-AV were similar to internal consistencies of the original SCS, which have been reported between $\alpha = .82$ and $\alpha = .93$

Table 3
Hierarchical Regression Analysis

Criterion	Predictor	B	*SE* B	β	R^2	ΔR^2
GPAI	Step 1				.03	.03
	SC-AV	−.07	.05	−.17		
	Step 2				.08*	.05*
	SC-AV	<.00	.06	.01		
	Time 1 SCS-AV	.45	.21	.29*		

Note. GPAI = the Game Performance Assessment Inventory; SC-AV = Self-Criticism Athlete−Version; SCS-AV = Self-Compassion Scale−Athlete Version.
* $p < .05$.

with women athletes (Ferguson et al., 2014, 2015; Killham, 2014; Mosewich et al., 2011; Reis et al., 2015). Therefore, there is initial evidence that the SCS-AV is a reliable tool when conducting sport-specific self-compassion research with women athletes. Utilizing a sport-specific measure will lead to a more accurate understanding of women athletes' self-compassion in sport and contribute to a foundation for understanding and applying self-compassion in sport contexts.

Researchers using qualitative designs have found that young women athletes rely on self-criticism in sport contexts (Ferguson et al., 2014; Sutherland et al., 2014). More specifically, women athletes have expressed concerns that being self-compassionate may take away from their sport performance, and that adopting a kind and caring self-attitude would be letting themselves off the hook in sport (Ferguson et al., 2014). Further, women athletes have indicated that self-criticism is not only helpful but is also necessary for athletic success (Ferguson et al., 2014; Sutherland et al., 2014). The results of this study are contrary to these findings, as self-criticism was not significantly related to athletes' postcompetition perceived sport performance. There is the possibility that self-criticism was not related to perceived sport performance due to specificity differences in the measures used in our study. A less specific or more trait level self-criticism measure might have yielded results more consistent with the study hypotheses that self-criticism would be negatively related to perceived sport performance. However, it is also possible that a competition-specific measure of self-criticism would better align with the perceived sport performance measure. Regardless, our findings suggest that self-criticism is not a positive factor in women athletes' perceived sport performance. A self-critical perspective has been related to the fear of failure and the fear of negative evaluation in sport contexts (Mosewich et al., 2013), which has the potential to lead to complacency and subsequently reduce performance, concerns that athletes have expressed in previous research (Ferguson et al., 2015; Sutherland et al., 2014). In other words, findings from this study and others highlight that being critical toward oneself in sport is not linked to perceived positive performance.

Researchers have proposed that self-compassion is a potential buffer in sport, specifically against self-criticism and complacency (Mosewich et al., 2013). Conceptually, self-compassion encourages individuals to continually strive toward personal improvement and therefore should not create issues with stagnation or complacency (Neff, 2003b). Individuals with high self-compassion tend to take more responsibility for mistakes (Ferguson et al., 2014; Leary et al., 2007), show personal initiative (Ferguson et al., 2014), and engage in self-improvement motivated behaviors (Breines & Chen, 2012). The current findings support this contention and suggest that women athletes can have higher or more positive perceived sport performance while also being self-compassionate, as evidenced by positive relationships between levels of self-compassion in sport and perceived sport performance. Even though reported effect sizes were small, the unique variance accounted for by self-compassion in perceived sport performance highlight that self-compassion plays a role in perceived sport performance beyond self-criticism in a highly critical and evaluative context. Further, recognizing that self-criticism can be a destructive way of relating to the self and that self-compassion should not lead to compla-

cency bolsters the value of applying self-compassion in sport contexts to help manage the challenges that women face in sport related to self-criticism and performance evaluation.

Leary et al. (2007) proposed that self-compassion might help individuals perceive themselves more clearly and accurately, which suggests that self-compassion might assist athletes to hold more balanced and realistic perspectives of their performance when evaluating their sport performance after a competition. Moreover, it is also possible that the balanced perspective associated with self-compassion could help athletes to persevere during challenging experiences related to sport performance, in turn providing them with the opportunity to learn from their mistakes as they work toward achieving their goals in sport. Self-compassion appears to be a viable psychological construct to predict perceived sport performance and contributes to the existing sport performance literature that focuses on self-concept (Marsh & Perry, 2005), adaptive coping (Hoar, Kowalski, Gaudreau, & Crocker, 2006), and emotion regulation (Wagstaff, 2014).

Overall, the results of this study suggest that self-compassion is related to higher perceived sport performance, whereas self-criticism is unrelated to perceived sport performance. Further, there is full support that self-compassion plays a role in women athletes' perceived sport performance beyond self-criticism, highlighting that self-compassion is a valuable resource for women athletes when evaluating their performance that can also buffer against the challenges of self-criticism in sport.

Limitations

Although this study contributes novel information to the understanding of how self-compassion is related to and plays a role in women athletes' perceived sport performance, limitations to this study are worthy of attention and suggest a need for further examination of women athletes' self-compassion, perceived sport performance, and self-criticism. One of the limitations of this study was the ongoing challenge related to measuring performance in sport. Performance is a complex and multidimensional construct that is operationalized in a variety of ways in the sport psychology literature and is typically assessed through single-item measures that have been developed for specific studies but have yet to go through a validation process (Robazza, Pellizzari, Bertollo, & Hanin, 2008). The GPAI was used in this study to measure perceived sport performance; however, it was originally developed for the evaluations of a group's or a team's physical activity (Oslin et al., 1998). This is a limitation because both team and individual sport athletes participated in the current study. Recognizing the challenges with performance measures, and the use of the GPAI in this study and other sport research (Pope & Wilson, 2015), caution is warranted when interpreting the results because it is possible that the GPAI used herein did not capture the full conceptual bandwidth of the perceived sport performance.

Additional limitations pertain to variation between athletes' specific competition and timing of data collection. For instance, depending on the meaning of the specific competition that the data were collected around (e.g., a qualifying match vs. a round robin competition), the athlete's perception of the competition may have influenced their responses to questionnaire items. Further, the specific competitions that the data were collected around occurred at varied points of the competitive season. The variability in both the perceived importance of competition (and subsequent performance in that competition) and the timing of competition has the potential to introduce possible confounding variables. Finally, due to self-report measures of the perceived sport performance, it was not possible to determine if self-compassion is related to more objective measures of sport performance (e.g., time or distance).

Future Directions

Critical next steps in this line of research include expanding on the current study findings. Moving beyond cross-sectional study designs in sport contexts is advantageous due to the dynamic nature of sport and the potential for this context to continuously change over time. Longitudinal study designs will therefore help to identify the trajectories of and relationships between self-compassion, sport performance, and self-criticism for women athletes over time. As discussed earlier, because the measurement of sport performance is so diverse, identifying ad-

ditional or alternative measures of performance that best capture this construct is an important area for future research in this field of study. It will be important to assess performance from a multidimensional approach in future research to work toward understanding as much about sport performance as possible and how it is related to women athletes' sport experiences, such as their well-being and self-compassion in sport.

Although initial reliability values for the modified self-compassion measure are similar to internal consistency values for the original measure in other research with women athletes, scores from the SCS-AV measure have not been examined for structural validity or invariance and warrant further examination. Psychometric assessment of construct and content validity for the SCS-AV, as well as further assessment of the score reliability, should be conducted with athlete populations to make accurate inferences about a sample based on data collected with the SCS-AV (Furr & Bacharach, 2014). The measurement of self-compassion with both the SCS and the SCS-AV measures will also be important to address the extent to which the two measures assess different constructs. Providing validity and reliability evidence for the SCS-AV may encourage researchers in the area to confidently consider its inclusion in sport-related research through ease of access and domain specificity.

Another future direction could be to consider athletes' important others in sport contexts, such as coaches, to explore the impact that they can have on athletes' self-criticism, self-compassion, and performance. Finally, because of the conceptual connections between self-compassion, motivation, and performance (Breines & Chen, 2012), it will be important to conduct research that works to situate self-compassion within or related to motivation theories to assist in describing the role of self-compassion in athletes' mastery and self-improvement motivations.

Conclusions

Given emerging findings from this study that self-compassion is positively related to women athletes' perceived sport performance and that self-criticism is unrelated to perceived sport performance, it is important to continue this line of inquiry to better understand self-compassion and women athletes' sport performance. The continued exploration of self-compassion and athletes' sport experiences, through a variety of quantitative and qualitative approaches, might be beneficial to determine if self-compassion can be applied in sport to promote athletes' sport performance and sport experiences in a constructive and healthy manner.

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