Running Head: Descriptive norms and self-compassion

Short Communication

The company we keep: Exploring the relationship between perceived teammate self-compassion and athlete self-compassion

Abstract

Objectives: The purpose was to explore the relationship between athletes' self-compassion and perceptions of their teammates' self-compassion (descriptive norm). A secondary purpose was to explore whether gender moderated this relationship.

Design: Cross-sectional, online survey.

Method: Team sport competitive athletes (N = 108; M_{age} = 23.1 years; SD_{age} = 4.68) reported their descriptive norm perceptions of their teammates' self-compassion as well as their own self-compassion.

Results: Hierarchical regression analysis indicated a positive relationship between descriptive norms and self-compassion, explaining 17.2% of the variance in self-compassion. The more it was perceived that teammates were engaging in self-compassion, the more likely athletes reported being self-compassionate (β = .39). There were no significant main or interaction effects of gender.

Conclusions: Athletes' self-compassion is related to their perceptions of how often their teammates are self-compassionate. Coaches and sport psychologists should encourage athletes to build awareness about how their cognitions and behaviours relate to others' cognitions and behaviours.

Keywords: social norm; sport; team sport; self-attitude; coping

The company we keep: Exploring the relationship between perceived teammate self-compassion and athlete self-compassion

In sport, athletes often encounter setbacks, emotional difficulties, and failures. Effective coping strategies are essential to help athletes navigate these experiences in an adaptive manner (Hoar, Kowalski, Gaudreau, & Crocker, 2006). One such coping strategy is self-compassion, which entails being moved by one's own suffering with the desire to alleviate that suffering (Neff, 2003a). Neff (2003a) conceptualized self-compassion as consisting of three components: *self-kindness* (extending care and understanding towards the self, rather than harsh judgment when confronted with suffering); *common humanity* (recognizing that suffering, feeling inadequate, and experiencing setbacks are shared experiences, as opposed to feeling isolated or alone in one's suffering); and, *mindfulness* (a balanced awareness between rumination and thought-suppression so feelings are neither ignored nor over-identified).

Extending compassion towards the self has received increasing research attention in the context of sport, largely because it may be a useful resource for athletes to manage the setbacks, emotional difficulties, and failures they may experience while also promoting positive wellbeing (Ferguson, Kowalski, Mack, & Sabiston, 2014; Mosewich, Crocker, & Kowalski, 2014; Reis et al., 2015; Sutherland et al., 2014). Previous research has primarily focused on women athletes, and found that athletes with greater self-compassion have greater autonomy, body appreciation, personal growth, purpose in life, responsibility, positivity, and perseverance (Ferguson et al., 2014; Ferguson, Kowalski, Mack, & Sabiston, 2015), as well as lower shame-proneness, social physique anxiety, objectified body consciousness, fear of failure, and fear of negative evaluation (Mosewich, Kowalski, Sabiston, Sedgwick, & Tracy, 2011). Moreover, teaching women athletes to be self-compassionate over a seven-day

intervention resulted in decreased self-criticism, rumination, and concern over mistakes (Mosewich, Crocker, Kowalski, & DeLongis, 2013).

Research on men athletes' self-compassion is minimal; it has been found that men athletes have greater self-compassion than non-athletes, and that men athletes with greater self-compassion are less likely to experience depression and self-stigma (Wasylkiw & Clairo, 2018). In addition, men athletes with higher self-compassion had more positive attitudes toward help-seeking (Wasylkiw & Clairo, 2018). Taken together, given the positive outcomes associated with self-compassion in both men and women athletes, exploring what factors may contribute to athletes' tendency to be self-compassionate is important.

Although self-compassion has often been conceptualized as an individual experience, recent research has suggested that self-compassion can develop through an individual's social environment. In an exercise setting, Berry, Kowalski, Ferguson, and McHugh (2010) found that the presence of others may act as a facilitator or catalyst of self-compassion experiences. Further, through qualitative interviews with women varsity athletes, Ingstrup, Mosewich, and Holt (2017) found groups of important others contribute to the development of self-compassion: including parents and peers (e.g., teammates). In regard to the latter, athletes discussed that they observed how teammates coped with adversity in an effort to determine how they themselves might cope. As such, athletes may look to how self-compassionate their teammates are, which then may impact their own engagement in self-compassion.

An athlete's perception of what their teammates are doing can be considered a descriptive norm (Cialdini, Reno, & Kallgren, 1990). Descriptive norms reflect an individual's perception of what is *typical*, and motivates individuals to act similarly as it is perceived to be the most appropriate behaviour. In effect, an individual is likely to engage in a similar manner (self-compassionately) to what most others are doing (if teammates are perceived to be self-compassionate). There is support for this idea in sport settings, as

athletes' perceptions of others' effort (descriptive norm) has been positively related to self-reported effort (Spink, Crozier, & Robinson, 2013).

The main purpose of the current study was to explore the relationship between athletes' self-compassion and perceptions of their teammates' self-compassion (descriptive norm). Based on previous qualitative research (Berry et al., 2010; Ingstrup et al., 2017), it was hypothesized that a positive relationship would emerge between descriptive norm perceptions and self-reported self-compassion. A secondary purpose was to explore whether gender moderates the descriptive norm—self-compassion relationship. The rationale for exploring gender in relation to norms and self-compassion was two-fold. First, youth sport literature has found that girls reported greater team norm perceptions than boys, suggesting that norms may differ between gender (Bruner, Carreau, Wilson, & Penney, 2014). Second, researchers have found that women athletes' perceptions of task cohesion were more readily influenced by perceptions of their teammates' behaviours (personal sacrifice) when compared with men athletes (Cronin, Arthur, Hardy, & Callow, 2015). As such, it may be that the relationship between descriptive norms and self-compassion will be stronger for women when compared to men athletes. However, as this is the first study to examine gender as a moderating variable between descriptive norms and self-compassion, it was an exploratory analysis, with no a priori hypothesis.

Methods

Participants

One-hundred and eight adult competitive athletes from 23 teams participating in interdependent sports completed the study. Participants lived in either Australia (n = 51, 47.2%) or Canada (n = 57, 52.8%). The most frequently cited team sports were soccer (n = 12), cricket (n = 11), volleyball (n = 10), basketball (n = 10), ice hockey (n = 8), broomball (n = 8), wheelchair basketball (n = 7), and netball (n = 6). All other sports were cited fewer than

five times. The mean age of participants was 23.1 years (*SD* = 4.68), and there was a relatively even split of female (53.7%) and male (45.4%) participants (1 participant identified as androgyne)[1]. Participants' current level of competition included local (i.e., competed against teams in nearby communities; *n* = 31, 28.7%), state/provincial (i.e., competed against teams from within their state, province, or territory; *n* = 28, 25.9%), regional (i.e., competed against teams from nearby states/provinces/territories; *n* = 14, 13%), national (i.e., competed at a national competition; *n* = 27, 25%), and international (i.e., member of a national team or competes against teams from other countries; *n* = 8, 7.4%).

Procedures

After receiving ethics approval from all authors' institutions, participants were recruited through three outlets. First, study information and a survey link was posted on social media outlets (e.g., Facebook, Twitter) as well as university student webpages from November 2016 through to December 2017. In order to reach a larger proportion of our target sample (i.e., athletes aged 18-35 competing in team sports), snowball sampling was also used (Trochim, 2006). Specifically, individuals who viewed the study information on social media outlets had the opportunity to "share" the original post among their own networks, which led to the study information reaching a broader network of potential participants. A third recruitment strategy included sending coaches or team managers an e-mail outlining the purpose of the study, and asking them to forward the survey link to their athletes.

Interested individuals were invited to click the website link, which took them to the online survey. Potential participants were presented with information regarding the study and were asked to provide informed consent. Participants then completed demographic and inclusion criteria questions. Individuals were excluded from completing the study if they

[1] The participant that identified as androgynous was not included in the gender difference or moderation analyses.

competed at a recreational level (n = 17), were less than 17 or above 35 years of age (n = 25), or competed in a sport that was not interdependent (n = 11). Eligible participants then completed measures of their descriptive norm perceptions and self-compassion in sport. Completion of the survey took participants less than 10 minutes and occurred on an electronic device when convenient.

Measures

Demographics. Participants reported their age, gender, main sport, competitive level, and country of residence.

Self-compassion. The athlete version of the Self-Compassion Scale (SCS-AV; ([redacted], 2018) was used to measure participants' self-compassion in sport. The scale was developed from the original 26 item Self-Compassion Scale (SCS; Neff, 2003b), and includes language that is specific to sport (e.g., specifying *athletes* instead of *people*, *sport* instead of *in general*), which shifts the measure to be context-specific rather than a general measure of self-compassion. The number of items per subscale, number of total scale items, general content of each item, and scoring procedure remained unchanged between the original SCS and the SCS-AV. The SCS-AV consists of the same six subscales as the original SCS. Three subscales reflect the direct conceptualization of self-compassion: self-kindness (5 items; e.g., "I'm tolerant of my own athletic flaws and inadequacies."), mindfulness (4 items; e.g., "When something upsets me in my sport I try to keep my emotions in balance."), and common humanity (4 items; e.g., "I try to see my failings as part of the sport experience."). The three remaining subscales essentially assess elements in opposition of each conceptualized component of self-compassion: self-judgment (5 items; e.g., "When times are really difficult in my sport, I tend to be tough on myself."), over-identification (4 items; e.g., "When something upsets me in my sport I get carried away with my feelings."), and isolation (4 items; e.g., "When I fail in my sport, I tend to feel alone

in my failure."), respectively. Response options range from 1 (*almost never*) to 5 (*almost always*). A mean score was calculated by first reverse coding negative items, and then averaging the 26 items, with higher scores indicative of greater self-compassion in sport. Support for use of the composite SCS score has been well documented in many populations and contexts (Neff et al., 2017). Internal consistency scores for the SCS-AV has been reported at $\alpha = .85$ and $\alpha = .88$ in women athletes, and scores on the measure have been negatively related to scores on a measure of self-criticism in sport and positively related to perceived sport performance ([redacted], 2018). The current study also showed adequate reliability in a sample of women and men athletes ($\alpha = .91$).

Descriptive norm perceptions for self-compassion. The descriptive norm questions examined the participants' perceptions of teammates' self-compassion. Three items from the SCS-AV[2] were modified to reflect descriptive norm perceptions, targeting athletes' perceptions of how frequently their teammates acted self-compassionately: "How often do you think that your teammates try to be loving towards themselves when they are feeling emotional pain in sport?"; "How often do you think your teammates try to keep things in perspective when they fail at sport?"; and "How often do you think that your teammates, when they are feeling down and out, remind themselves that there are lots of other athletes feeling like they are?". Items measured the three components of self-compassion as conceptualized by Neff (i.e., self-kindness, mindfulness, common humanity, respectively; 2003a). Further, the development of these questions was guided by previous research in the sport setting assessing individuals' descriptive norm perceptions of others' effort (Spink et

[2] Descriptive norms were initially measured with six items, including three questions related to the negatively phrased sub-scales of the SCS-AV (i.e., self-judgment, over-identification, and isolation). However, the three negatively-phrased items were dropped due to measurement model inadequacy (SB $\chi^2 = 35.83$ ($p < .01$); RMSEA = 0.21; TLI = 0.53; CFI = .72; SRMR = 0.14).

al., 2013) and followed the guidelines of Ajzen (2002) on developing items to assess descriptive norms (i.e., using a specific referent group and a target behaviour). Participants responded on a 7-point Likert scale, ranging from 1 (*never*) to 7 (*very often*). The three items had acceptable reliability ($\alpha = .76$), thus were averaged, with larger scores indicating greater perceptions of how often teammates were self-compassionate.

Data Analysis

Hierarchical linear regression was used to examine the relationship between descriptive norm perceptions and individuals' self-compassion, as well as the moderating effect of gender. With self-compassion as the dependent variable, descriptive norms and gender (i.e., independent variables) were entered on the first step, with the interaction variable (gender x descriptive norms) entered on the second step[3]. To create the interaction variable, gender was first dummy coded (0 = male, 1 = female) and the descriptive norm variable was centred along the mean (Frazier, Tix, & Barron, 2004). An interaction term was then created by multiplying the dummy-coded gender variable with the centred descriptive norm variable.

Results

Preliminary Analyses

Prior to analysis, data were first screened for missing data. Approximately 10 pieces of data from different participants (nine for self-compassion, and one descriptive norm response) were missing, which was less than .05% of the data. Due to the small sample size, within-person mean values for those missing data points were imputed to retain all possible data (Tabachnick & Fidell, 2013). Outliers and normality were examined through box plots and skewness/kurtosis values. All data were considered normal, thus no transformations were

[3]Both country of residence and age were not significantly related to the independent or dependent variables. Thus, they were not included in the analyses as potential covariates.

necessary. Overall, athletes had a mean score of 3.04 on the self-compassion scale (*SD* = .65) and 3.88 on descriptive norm perceptions (*SD* = 1.08). To explore potential gender differences on self-compassion and descriptive norms, *t*-tests were conducted. No significant differences were found between males and females on self-compassion, $t(105) = -.63$, $p = .53$, or descriptive norms, $t(105) = -1.79$, $p = .08$ (see supplementary file).

Hypothesis Testing

Results from the first step of the regression model including descriptive norm perceptions and gender significantly predicted athlete self-compassion, $F(2, 104) = 10.77$, $p < .001$, explaining 17.2% of the variance in self-compassion. Specifically, there was a main effect of descriptive norm ($p < .001$), with no main effect ($p = .91$) of gender on self-compassion. As such, the more it was perceived that teammates were engaging in self-compassion, the more likely athletes reported also being self-compassionate ($\beta = .42$).

Results from the second step of the regression model showed a non-significant change, $F_{change}(1, 103) = 0.06$, $p = .81$, $R^2_{change} < .001$. Specifically, the interactive effect of descriptive norms and gender was non-significant ($p = .81$), with the only significant predictor of self-compassion being descriptive norm perceptions ($\beta = .42$, $p < .01$). As such, the relationship between descriptive norms and self-compassion was not moderated by gender.

Discussion

The purpose of this study was to explore the relationship between self-compassion and individuals' perceptions of their teammates' self-compassion (descriptive norms). Further, we explored whether the relationship was moderated by gender. From the results, three discussion points are noteworthy.

First, the findings add to the growing self-compassion literature in sport contexts by supporting a relationship between perceptions of teammates' self-compassion and athletes'

self-reported self-compassion. This finding aligns with a qualitative report suggesting that athletes' development and use of self-compassion may be influenced by others, including their teammates (Ingstrup et al., 2017). The positive relationship between norms and self-compassion evident in the current study suggests that an increase in the amount of self-compassion used by teammates may potentially be beneficial if such change is perceived by other athletes. Therefore, findings from the current study provide additional support for, and expand on, past qualitative research regarding the importance of others in the development, and athlete use, of self-compassion.

Second, these results add to the research examining team norms (Gammage, Carron, & Estabrooks, 2001; Munroe, Estabrooks, Dennis, & Carron, 1999) and descriptive norms (Crozier & Spink, 2017; Spink et al., 2013) in sport. Consistent with previous research (Spink et al., 2013), the current study found a positive relationship between descriptive norm perceptions and athletes' self-reported engagement in that same cognition/behavior (self-compassion in this study). Taken together, there is growing evidence that teammates', and the perception of those teammates' cognitions/behaviours, may be influential in shaping the cognitions/behaviours of individual athletes.

Lastly, findings also indicated that gender did not moderate the relationship between descriptive norms and self-compassion. This is an important contribution to the self-compassion literature in sport contexts, which, until recently (see Wasylkiw & Clairo, 2018), has focused primarily on women athletes. While previous research had indicated women athlete's cognitions might be more influenced by their teammates' behaviours (Cronin et al. 2015), it seems that in relation to athlete self-compassion, women athletes are no more influenced by perceptions of their teammates' self-compassion than men athletes. Although not a main purpose of the study, there was also a lack of difference found between men and women athletes' perceptions of both self-compassion and descriptive norms. This finding is

novel for the self-compassion literature, as few researchers in the sport context have explored gender differences. Further, this finding contrasts with results of Bruner et al.'s (2014) study in the youth sport setting, whereby females had greater perceptions of norms than males. Practical implications may include an expectation that self-compassion promotion or intervention efforts harnessing the influence of others may be similarly impactful to both men and women athletes.

Reflecting on the findings of the current study, it seems that further exploration of the impact of others on self-compassion is warranted. The present study provided an initial exploration of the relationship between self-compassion and descriptive norms; however, future research is necessary to understand directionality, causality, and mechanisms of the relationship. In terms of directionality, it may be that athletes' self-compassion also positively predicts the degree to which they notice their teammates' engagement in self-compassion. Further, the cross-sectional design does not allow for examination of causation, thus results are interpreted as relationships only. More advanced research designs (e.g., longitudinal, experimental) would also permit examination of the mechanisms supporting change in self-compassion and perception of others' self-compassion over time, as well as other variables (e.g., age, competition level, type of team sport) that may impact the strength of the relationship demonstrated in the present study.

Despite these limitations, the results suggest the potential importance of others, in particular teammates, when exploring predictors of athletes' self-compassion. Practically, coaches and sport practitioners might encourage both men and women athletes to be self-compassionate when faced with adversity and hardship in sport, to make it descriptively normative to be self-compassionate in a team environment.

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