SELF-COMPASSION AS A RESOURCE TO MANAGE STRESS IN WOMEN ATHLETES

by

Amber Dawn Mosewich

B.Sc. (Hons.), University of Saskatchewan, 2006
M.Sc., University of Saskatchewan, 2008

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

The Faculty of Graduate Studies

(Kinesiology)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

April 2013

© Amber Dawn Mosewich, 2013
Abstract

Competitive sport presents unique issues that can create a variety of demands on athletes. The purpose of this dissertation was to further understanding of self-compassion in women athletes managing challenging situations in sport. Key focuses included the fit of self-compassion within the stress and coping process, relation of self-compassion with sport-relevant variables, and self-compassion intervention effectiveness with women athletes. Three studies worked towards accomplishing this objective. The first study took a phenomenological orientation to explore women athletes’ experiences with setbacks and accompanying coping responses, including the role of self-compassion. Thematic analysis revealed poor performance, performance plateau, and injury were common setback experiences. Managing setbacks involved having a positive approach, managing self-criticism, using social support, and striving for balance. Results suggested fostering self-compassionate perspectives may positively add to coping skills resources through targeting issues the athletes identified as challenging, such as rumination and self-criticism in pursuit of perfection. Given these issues, and the conceptual links to coping expressed in the initial study, a second prospective study examined the relations between self-compassion, perfectionism, and the stress and coping process. Self-compassion was negatively related to social evaluative aspects of perfectionism, threat appraisal, avoidance coping, and negative affect, and positively related to control appraisal. Though no support was found for self-compassion as a moderator variable in the relation between goal progress and different aspects of the stress and coping process, results indicated that both goal progress and self-compassion were important individual predictors of the stress process. These results strengthen self-compassion’s theoretical and empirical connection to evaluative processes and coping in athletes. The third study evaluated a self-compassion intervention consisting of
psychoeducation and writing components designed to promote self-compassionate mind-frames when dealing with difficult events. The self-compassion intervention was successful, resulting in higher levels of self-compassion, and lower levels of state self-criticism, state rumination, and concern over mistakes in a group of varsity women athletes, compared to an attention control group. The intervention supported the use of self-compassion to help women athletes manage stress. Overall, this dissertation provides support for the utility of self-compassion in sport as a resource for women athletes.
Preface

Study 1 (outlined in Chapter 2) was conducted at the University of British Columbia. A version of this work has been accepted for publication in *Qualitative Research in Sport, Exercise, and Health* (copyright Taylor & Francis). Dr. Peter Crocker and Dr. Kent Kowalski are co-authors on the manuscript. My co-authors aided in study design and manuscript editing. I was involved in all stages of the research process, including study design, ethics application, participant recruitment, data collection and analysis, and manuscript preparation. Chapter 2 is a version of a manuscript of an article whose final and definitive form, the Version of Record, has been published in *Qualitative Research in Sport, Exercise, and Health* (date of publication online: February 12, 2013; copyright Taylor & Francis), available online at: http://www.tandfonline.com/[DOI:10.1080/2159676X.2013.766810]. The citation is as follows: [Mosewich, A. D., Crocker, P. R. E., & Kowalski, K. C. (2013). Managing injury and other setbacks in sport: Experiences of (and resources for) high performance women athletes. *Qualitative Research in Sport, Exercise, and Health.* Advance online publication. doi:10.1080/2159676X.2013.766810]. Print form will also be available from the journal. Ethical approval was granted by the University of British Columbia Behavioural Research Ethics Board (H09-02846).

Study 2 (outlined in Chapter 3) was also conducted at the University of British Columbia. This work was associated with a Social Sciences and Humanities Research Council of Canada (SSHRC) grant held by Dr. Peter Crocker. Dr. Peter Crocker, Dr. Kent Kowalski, Dr. Patrick Gaudreau, and Dr. Catherine Sabiston are co-authors on this work, and a version will be submitted for publication. My co-authors aided in study design and manuscript editing, and Dr.
Peter Crocker helped to guide the data analysis. I was responsible for incorporating the self-compassion construct into the research, and was primarily responsible for participant recruitment, data collection and analysis, and manuscript preparation. Ethical approval was granted by the University of British Columbia Behavioural Research Ethics Board (H10-01387).

Study 3 (outlined in Chapter 4) was conducted at the University of British Columbia, and data was collected at the University of British Columbia, the University of Saskatchewan, and the University of Regina. A version of this work has been submitted for publication. Dr. Peter Crocker, Dr. Kent Kowalski, and Dr. Anita DeLongis are co-authors on the manuscript. My co-authors aided in study design and manuscript editing. I was involved in all stages of the research process, including study design, ethics application, participant recruitment, conducting the intervention and control group sessions, data collection and analysis, and manuscript preparation. Ethical approval was granted by the University of British Columbia Behavioural Research Ethics Board (H11-02583).
# Table of Contents

Abstract ........................................................................................................................................ ii
Preface.......................................................................................................................................... iv
Table of Contents ........................................................................................................................ vi
List of Tables ................................................................................................................................ xi
Acknowledgements ...................................................................................................................... xii
Dedication ...................................................................................................................................... xiv

Chapter 1: Introduction .................................................................................................................. 1

1.1 Stress and Coping in Sport .................................................................................................... 1
    1.1.1 Cognitive-Motivational-Relational Theory of Emotion: A common coping framework. .................................................................................................................................................................................. 2
    1.1.2 Coping frameworks in sport: Promoting effective coping strategies and resources. ..... 5
1.2 Situating Self-Compassion: Potential Role and Relevance in Sport ........................................... 6
    1.2.1 Self-compassion defined.................................................................................................. 6
    1.2.2 Self-compassion and adaptive functioning.................................................................... 7
    1.2.3 Self-compassion as a coping resource. ......................................................................... 11
    1.2.4 Managing hardships in sport: The role of self-compassion.......................................... 14
    1.2.5 Interventions to foster a self-compassionate mindset................................................ 15
1.3 Applying Self-Compassion in Sport ......................................................................................... 23
1.4 General Overview of Purpose and Objectives ......................................................................... 25

Chapter 2: Managing Injury and Other Setbacks in Sport: Experiences of (and Resources for) High Performance Women Athletes .................................................................................. 27

2.1 Introduction ............................................................................................................................ 27
2.2 Method ................................................................................................................................... 31
    2.2.1 Participants. .................................................................................................................. 31
2.2.2 Procedure. ................................................................. 31
2.2.3 Interview guide. .......................................................... 33
2.2.4 Data analysis .............................................................. 33
2.2.5 Credibility. ................................................................. 34
2.2.6 The researcher in the research study .................................. 35
2.3 Findings ........................................................................... 36
  2.3.1 Setback experiences .................................................... 36
  2.3.2 Approaching and managing setback experiences .............. 44
2.4 Discussion ....................................................................... 49
  2.4.1 Injury: Common and challenging. ................................. 50
  2.4.2 Performance plateau: Need for awareness, understanding, and support. ................................. 52
  2.4.3 Expanding resources: The potential of self-compassion and mindfulness ..................................... 54
  2.4.4 Moving forward: Conclusion ........................................ 56
2.5 Bridging Summary ............................................................ 58
Chapter 3: Examining Moderation and Direct Effects of Self-Compassion in the Stress and Coping Process in Women Athletes ................................................................. 59
  3.1 Introduction .................................................................... 59
    3.1.1 Self-compassion in the stress and coping process .......... 60
    3.1.2 Self-compassion and perfectionism ............................ 63
  3.2 Method ........................................................................... 65
    3.2.1 Participants ............................................................... 65
    3.2.2 Measures ................................................................. 66
    3.2.3 Procedure ............................................................... 69
  3.3 Results ............................................................................ 70
  3.4 Discussion ...................................................................... 71
3.4.1 Self-compassion and perfectionism ................................................................. 71
3.4.2 Self-compassion and appraisal ................................................................. 72
3.4.3 Self-compassion and coping ................................................................. 73
3.4.4 Self-compassion and affect ................................................................. 74
3.4.5 Self-compassion as a moderator of the stress and coping process .......... 75
3.4.6 Strengths, limitations, and future directions ........................................ 76
3.4.7 Conclusion ......................................................................................... 77
3.5 Bridging Summary .................................................................................. 83
Chapter 4: Applying Self-Compassion in Sport: An Intervention with Women Athletes .... 85
4.1 Introduction ............................................................................................. 85
4.2 Method ...................................................................................................... 90
  4.2.1 Participants ....................................................................................... 90
  4.2.2 Procedure ......................................................................................... 92
  4.2.3 Measures ......................................................................................... 94
  4.2.4 Intervention design ........................................................................ 97
  4.2.5 Data analysis .................................................................................. 101
4.3 Results .................................................................................................... 101
4.4 Discussion .............................................................................................. 102
  4.4.1 Future direction and application ...................................................... 103
  4.4.2 Intervention evaluation ................................................................. 104
  4.4.3 Summary and implications .......................................................... 106
Chapter 5: General Discussion .................................................................. 108
  5.1 Mechanisms of Self-Compassionate Mind-frames: Implications for Application .... 111
    5.1.1 Emotion regulation ...................................................................... 112
    5.1.2 Schemas ..................................................................................... 116
5.1.3 Concluding remarks on mechanisms ................................................................. 117
5.2 Extension to Self-Regulation and Adherence .................................................... 120
5.3 Knowledge Transfer ............................................................................................ 121
5.4 Promotion of the Positives: Not Merely an Avoidance of the Negatives .......... 122
  5.4.1 Self-compassion and the ‘Broaden-and-Build Theory of Positive Emotion’.... 123
  5.4.2 Self-compassion and human potential ............................................................ 125
5.5 Self-Compassion: Is It All Positive? .................................................................. 126
5.6 Approach to Program of Research ...................................................................... 128
  5.6.1 Epistemology .................................................................................................. 128
  5.6.2 Pragmatism and mixed methods research ..................................................... 129
  5.6.3 Advantages of mixed methods research ....................................................... 130
  5.6.4 Criticisms and challenges of mixed methods approaches ......................... 131
5.7 Concluding Remarks ......................................................................................... 132
References .................................................................................................................. 134
Appendices .................................................................................................................. 158
  Appendix A: Consent Form for Study 1 ................................................................. 159
  Appendix B: Semi-Structured Interview Guide for Study 1 ............................... 163
  Appendix C: Demographics Questionnaire for Study 2 ..................................... 166
  Appendix D: Self-Compassion Scale (SCS) for Study 2 and Study 3 .............. 167
  Appendix E: Sport Multidimensional Perfectionism Scale-2 (SMPS-2) for Study 2 169
  Appendix F: Coping Function Questionnaire (CFQ) for Study 2 .................... 172
  Appendix G: Goal Progress Scale for Study 2 ..................................................... 173
  Appendix H: Cognitive Appraisal Measure for Study 2 .................................. 174
  Appendix I: Positive and Negative Affect Scale (PANAS) for Study 2 .......... 175
  Appendix J: Consent Form for Study 2 ............................................................... 176
Appendix K: Consent Form for Study 3 ................................................................. 178
Appendix L: Demographics Questionnaire for Study 3 ........................................ 182
Appendix M: Rumination Measure for Study 3 ..................................................... 183
Appendix N: Self-criticism Measure for Study 3 .................................................... 184
Appendix O: Concern over Mistakes Subscale for Study 3 ..................................... 185
Appendix P: Treatment Fidelity Items for Study 3 ................................................ 186
Appendix Q: Participant Feedback Form for Study 3 ............................................. 187
Appendix R: Outline of Self-Compassion Intervention Psychoeducation Presentation .... 188
Appendix S: Self-Compassion Intervention Applied Example for Session .............. 191
Appendix T: Self-Compassion Writing Modules ..................................................... 191
Appendix U: Outline of Attention Control Group Psychoeducation Presentation .......... 200
Appendix V: Attention Control Group Applied Example for Session ..................... 203
Appendix W: Attention Control Group Writing Modules ....................................... 203
**List of Tables**

<table>
<thead>
<tr>
<th>Table 3.1</th>
<th>Means, Standard Deviations, and Cronbach’s Alpha Values for Study Variables</th>
<th>79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 3.2</td>
<td>Pearson Product Moment Correlations for Self-Compassion and Components of Perfectionism from the SMPS-2 (Time 1)</td>
<td>80</td>
</tr>
<tr>
<td>Table 3.3</td>
<td>Pearson Product Moment Correlations for Self-Compassion (Time 1) and Goal Progress, Appraisal, Coping, and Affect (Time 2)</td>
<td>81</td>
</tr>
<tr>
<td>Table 3.4</td>
<td>Summary Table of Hierarchical Regression Analyses Showing Main Effects of Self-Compassion and Goal Progress (Step 1) and Interaction Effects (Step 2)</td>
<td>82</td>
</tr>
<tr>
<td>Table 4.1</td>
<td>Means and Standard Deviations for Self-Compassion, State Rumination, State Self-Criticism, and Concern Over Mistakes for the Self-Compassion (Experimental) and Attention Control Groups</td>
<td>107</td>
</tr>
</tbody>
</table>
Acknowledgements

First of all, I would like to thank my supervisor, Dr. Peter Crocker, for his continuous support and guidance in my journey through this program. Through combining learning, guidance, challenge, and support, he has helped me develop skills that are ready for application as I take my next step. I would also like to thank my committee members, Dr. Kent Kowalski and Dr. Anita DeLongis, for their support and interest in my work, and the invaluable feedback and expertise they brought to the research. With Dr. Kowalski, this work meant an extension of collaboration from my undergraduate and graduate work at the University of Saskatchewan – and I am so glad for the continued opportunity to work with such a great mind. Working with Dr. DeLongis created an opportunity for new perspectives and a wealth of new ideas and knowledge. Thank you both. I would also like to thank Dr. Whitney Sedgwick, Dr. Beth Haverkamp, and Dr. Mark Beauchamp for their guidance and advice in some specific areas – I appreciate your expertise.

Another important thank you goes to the women athletes who participated in my research. Thank you for your interest and support. None of this would have been possible without you. I wish all of you the best in your pursuits. Thanks also to the Social Sciences and Humanities Research Council of Canada and the University of British Columbia for their funding support.¹

Looking back on these years in Vancouver, I realize there was a great deal of learning and growing during my time here, and thank you to my friends and family, both near and far, for being there for me through the ups, the downs, and all the time in between. I hope you know

¹ My doctoral program was funded by a Social Sciences and Humanities Research Council of Canada (SSHRC) Scholarship (767-2008-1555 4) as well as scholarships from the University of British Columbia.
who you are, and truly understand how important you are to me. Thank you to the members, present and past, of the Exercise and Sport Psychology lab: Ben, Carolyn G., Carolyn M., Coralie, Erica, Katherine, Katie, Louisa, Sara, Sarah, So-Yeon, and Val – your support on not only the academic, but also on the personal side of life, has made you like family. Thank you for being there for me as both amazing colleagues and friends - I’m so grateful to have gotten to know each of you and cherish all we’ve experienced (and will continue to experience) together. Thank you for all you’ve taught me and for all of your help in this process – it has been integral. Thanks also to my friends who continue to show me that no matter where life may take you, or the distance it creates, the support and cheering squad is always there.

Finally, thank you to my family. Mum, Dad, “Crew” – thank you for always being by my side and supporting me through all of life’s experiences. You’ve been there every step of the way and have truly shaped who I am today. I treasure that we share all of life’s moments – big and small. I hope you know the key role each of you has played in this one. I am so lucky and thankful to have a family / “crew” this amazing. I can’t thank you enough for always being there - for anything and everything - and creating a system we all know we can count on.
To all those striving for their potential against all odds, both in sport and in life.
Chapter 1: Introduction

1.1 Stress and Coping in Sport

Athletes face a multitude of challenges, both in the sport context and in life in general. Some of these challenges will be experienced by the athlete as stress, which is an experience that arises through a person-environment relationship perceived as having a high demand or beyond a person’s resources (Lazarus & Folkman, 1984; Nicholls & Thelwell, 2010). There are individual variations in what athletes find stressful – what is stressful to one athlete is not necessarily stressful to another. Stressors can be chronic or acute, expected or unexpected, competitive or noncompetitive; and sources of stress commonly identified by athletes include competition stress, self-doubt, loss, fear of injury, psychological readiness for high performance, injury, training, coaching issues, relationship issues, financial issues, career direction, and the expectations of others (Gould, Finch, & Jackson, 1993; Gould, Udry, Brides, & Beck, 1997; Hoar, Kowalski, Gaudreau, & Crocker, 2006).

Managing these stressors requires that athletes have effective coping resources (Nicholls, 2010). Coping is a complex issue, reflecting “the constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). It is impacted by multiple factors, including appraisals, the situation, individual differences, personality, and social
resources (Folkman & Moskowitz, 2000), and is connected to an array of outcomes. The following sections provide more detail on the processes that can influence the stress and coping process. Following this overview, self-compassion, which is a relatively new, but potentially useful, construct with links to adaptive functioning and the stress and coping process, will be introduced. Self-compassion will be defined and positioned as a promising resource for athletes to help manage negative events.

**1.1.1 Cognitive-Motivational-Relational Theory of Emotion: A common coping framework.**

One of the most common coping frameworks in the sport and exercise psychology literature is Lazarus’ cognitive-motivational-relational theory of emotion (Lazarus, 1991c, 2000). Lazarus (1999) conceptualized stress, emotion, and coping as interrelated. The model focuses on process and places emphasis on the dynamic interplay among the environment, individuals, and their reactions to that environment (Lazarus, 1991c, 2000). Environmental variables include demands, resources, constraints, proximity, uncertainty, and duration of a situation. Individual or personal factors include a person’s motives, skills, abilities, and beliefs about both the self and the world. The term *relational* reflects that psychological stress and emotions are always a function of person-environment relationships involving threats, harms, or benefits (Lazarus, 2000; Lazarus & Folkman, 1984, 1987). These person-environment relationships may change due to time or circumstances (Lazarus & Folkman, 1984, 1987). *Motivational* implies that emotions and behaviours are reactions to our goals, values, and intentions (Lazarus, 2000). Motivation makes it possible to understand what makes an encounter or situation personally relevant and a source of benefit or harm, which leads to the experience of stress or emotion
Cognitive refers to knowledge and appraisal of what is happening in emotional encounters (Lazarus, 2000).

The complexities of stress and coping could not be adequately understood without consideration of cognitive appraisal, which intervenes between the stressor and the resultant reaction (Lazarus, 1991a, 2000; Lazarus & Folkman, 1984). Cognitive appraisal is defined as “the process of categorizing an encounter and its various facets with respect to its significance for well-being” (Lazarus & Folkman, 1984, p. 31). Levels of perceived stress vary as a result of the appraisal process, arising from the transaction between the person and the environment (Aldwin, 2007). There are two general types of appraisal, primary and secondary. These occur simultaneously and dictate the type and intensity of stress and emotion (Lazarus, 1999; Lazarus & Folkman, 1984). Primary appraisal is an evaluation of what is at stake in a situation (Folkman & Lazarus, 1984; Lazarus, 2000). The “primary” label comes not because it is more important than secondary appraisal, but because without something at stake, there is no potential for stress or emotion (Lazarus, 2000). Stress appraisals involve perceptions of harm/loss, threat, and/or challenge – the relevancy to values, goals, beliefs, and situational contentions (Lazarus, 1993a, 1993b; Lazarus & Folkman, 1984).

Secondary appraisal concerns the person’s resources and options for coping with an event (Lazarus, 2000; Folkman & Lazarus, 1984; C. A. Smith & Lazarus, 1993). This is particularly relevant when there is also a primary appraisal of threat, harm, or challenge (Lazarus, 1999). This process is not coping, but lays the foundation for coping (Lazarus, 1999). Secondary appraisal is an evaluation of what can be done in the situation, which depends on the individual’s available resources, level of perceived control, and expectations about what is likely to happen in the future (Lazarus, 1999; Lazarus & Folkman, 1984).
Given that the theory views the cognitive processes as engaging back and forth between primary and secondary appraisal, the notion of reappraisal must be addressed. Reappraisal is a changed appraisal that follows an earlier appraisal in the same situation, modified based on new information (Lazarus & Folkman, 1984). For example, with reappraisal, threat may now be seen as unwarranted, or, alternatively, a benign appraisal may now be seen as a threat (Lazarus & Folkman, 1984).

According to Lazarus’ conceptualization, coping not only follows stress and emotion, but can also shape such experiences (Lazarus, 2000). There are numerous strategies that can be used to manage stressful transactions. These can take the form of cognitions or behaviours. Typical examples of coping strategies in sport include seeking information, setting goals, increasing effort, reappraisal, communicating to others, relaxation, changing tactics, confrontation, venting, and seeking social support (see Hanin, 2010; Nicholls & Thelwell, 2010). At a micro-level, the number of specific coping strategies may be countless because of the specific demands and reaction of athletes in various sporting contexts (Hanin, 2010).

Although sport psychology research has primarily been informed by Lazarus and colleagues’ framework, there are multiple perspectives on coping and many different conceptualizations of broad categories of coping (e.g., Aldwin, 2007; Endler & Parker, 1994; Gaudreau, Blondin, & Lapierre, 2002; Lazarus & Folkman, 1984). However, three common coping functions are generally classified as problem-focused, emotion-focused, and avoidance coping. Problem-focused coping deals with changing the person-environment relationship that is causing the stress by directing change efforts at the environment or the individual (Lazarus, 1993a). Emotion-focused coping, on the other hand, attempts to change the way the stressful relationship in the environment is attended to (e.g., through increased attention) or to change the
perceived meaning of what is happening (Lazarus, 1993a). This does not change the condition, but the stress is decreased because the “relational meaning” (p. 238) has changed (Lazarus, 1993a). Avoidance coping involves mentally and/or physically withdrawing from the situation (Endler & Parker, 1994).

A person copes according to his or her resources, which include health or energy, beliefs, commitments, problem-solving skills, social skills, social support, and material resources (Lazarus & Folkman, 1984). Coping is also impacted by appraisals, the situation, and personality factors (Folkman & Moskowitz, 2000). Personality and individual differences have received relatively little attention in regard to their role in coping in the sport domain (Polman, Clough, & Levy, 2010). However, personality “creates a person’s characteristic patterns of behaviour, thoughts, and feelings” (Carver & Scheier, 2008, p. 5), and as such, would link to the coping process (Polman et al., 2010). Personality has the potential to influence coping in a variety of ways. Personality may influence the type and frequency of stressors encountered by an individual, as well as the appraisal of events and situations (DeLongis & Holtzman, 2005). Personality can also influence the options available in terms of coping strategies, as well as the choice in strategy and resultant effectiveness (DeLongis & Holtzman, 2005; Semmer, 2006; Suls & Martin, 2005). Thus, such variables are important to consider as the field moves towards a greater understanding of stress and coping processes and outcomes.

1.1.2 Coping frameworks in sport: Promoting effective coping strategies and resources.

In sport science, most of the stress and coping research focuses on competitive athletes (Hoar et al., 2006), as effective coping plays a key role in sport (Lazarus, 2000; Nicholls, 2010). Having the necessary skills to effectively deal with situations that arise in sport is also important
as it allows athletes to at least attempt to deal with the inevitable issues and challenges that accompany sport participation. Coping effectiveness is defined as the “degree in which a coping strategy or combination of strategies is or are successful in alleviating stress” (Nicholls, 2010, p. 264). Many researchers have argued that successful performance in sport, particularly during stressful times, requires effective coping resources (Haney & Long, 1995; Hanin, 2010; Lazarus, 2000). Effective coping skills have also been related to better adjustment to injury rehabilitation, faster recovery from injury, and lowered risk of reinjury and burnout (Hagger, Chatzisarantis, Griffin, & Thatcher, 2005; Raedeke & Smith, 2001, 2004; Udry, 1997). A key to coping effectiveness may be learning a variety of coping strategies (Gould, Eklund, & Jackson, 1993). Being familiar with and trained in various skills will increase the probability of an appropriate resource being available when needed, increasing potential for successful employment.

1.2 Situating Self-Compassion: Potential Role and Relevance in Sport

1.2.1 Self-compassion defined.

Self-compassion shows promise as a coping resource for athletes. Self-compassion involves a desire to alleviate personal suffering, offering nonjudgmental understanding, concern, and compassion to oneself, and is seen as an aid to combat self-criticalness (Neff, 2003b). It consists of three components: self-kindness, common humanity, and mindfulness (Neff, 2003b). Self-kindness involves being kind and understanding towards oneself in instances of pain or failure, as opposed to being overly self-critical (Neff, 2003b). When one feels inadequate, the self is given understanding and acceptance, although the issue in question may still be identified as problematic, in which case the required change or attention will be provided, but without harshness to the self (Neff, 2009). Common humanity refers to perceiving that one is not alone in his or her experiences (Neff, 2003b). Often when people fail or come across difficult times,
they feel their experience is unique and isolating, but in reality, problems and challenges are faced by everyone. Finally, mindfulness involves keeping painful thoughts and feelings in a “balanced awareness” (Neff, 2003b, p. 85), rather than overidentifying with them. Mindfulness allows for the maintenance of perspective during stressful times, resulting in a more constructive and objective focus, as one is not overwhelmed by emotion. Conceptually, self-compassion could have an influence at various points in the stress and coping process, including the appraisal of situations, the choice and options in coping efforts, coping effectiveness, or the use of self-compassion as a coping resource or strategy (A. B. Allen & Leary, 2010), all of which may influence resultant cognitive, emotional, and behavioural outcomes. The following sections will situate self-compassion within stress and coping by connecting the construct to adaptive functioning and stress and coping processes, as well as by discussing its potential role in managing difficult events in sport. Intervention approaches will be overviewed, culminating in a conceptualization of what self-compassion could offer as a strategy in the sport domain.

1.2.2 Self-compassion and adaptive functioning.

There is ample empirical evidence linking self-compassion to adaptive attributes, processes, and outcomes. Self-compassion has been related to psychological health, as it is negatively associated with negative affect, self-criticism, depression, anxiety, sadness, rumination, thought suppression, neuroticism, perfectionism, performance goals, self-conscious emotions (specifically guilt, shame, embarrassment, and humiliation), and disordered eating behaviours, and positively associated with life-satisfaction, social connectedness, emotional intelligence, mastery goals, happiness, optimism, positive affect, wisdom, personal initiative, curiosity and exploration, agreeableness, extroversion, and conscientiousness (Adams & Leary, 2007; Leary, Tate, Adams, Allen, & Hancock, 2007; Neff, 2003a; Neff, Hseih, & Dijitthirat,
Self-compassion is also related to increased levels of reflective and affective wisdom (Neff, Rude et al., 2007). Research also supports a positive association between self-compassion and well-being in young adults (Neff & McGehee, 2010; Wei, Liao, Ku, & Shaffer, 2011). High levels of self-compassion are also related to lower levels of fear of failure, possibly because failure situations are approached with kindness and understanding as opposed to harsh self-criticism and condemnation, allowing failure to be seen as a learning opportunity rather than an indicator of self-worth (Neff et al., 2005). People high in self-compassion are less likely to catastrophize or experience anxiety after a negative event, and avoid challenging tasks because they are afraid of failing (A. B. Allen & Leary, 2010).

Additionally, evaluation, setbacks, failures, and hard times could be more effectively managed with self-compassionate understanding and patience as opposed to rumination and self-criticism, which are negative thought patterns with a negative association to self-compassion (Leary et al., 2007; Neff, 2003b; Neff, Kirkpatrick, & Rude, 2007).

Although the promotion of self-esteem has a large focus in the sport domain (see Whitehead & Corbin, 1997), self-compassion is positioned as more adaptive than self-esteem in terms of developing a healthy attitude and relationship with oneself (Neff, 2003b). While self-compassion and self-esteem do tend to be related with correlations ranging from .57 to .59 (Leary et al., 2007; Neff, 2003a; Neff, Pisitsung-Kagarn, & Hseih, 2008), likely because self-compassionate individuals are more likely to feel good about themselves than those who lack self-compassion (Neff, 2009), research suggests self-compassion is a separate construct with unique contributions to the promotion of healthy, adaptive functioning. Research has indicated that, when controlling for self-esteem, self-compassion remained a significant predictor of depression and anxiety (in an American undergraduate sample; Neff, 2003a), social comparison,
public self-consciousness, self-rumination, anger, and need for cognitive closure (in a Dutch community sample; Neff & Vonk, 2009). The unique contribution of self-compassion over self-esteem has been supported in the sport and exercise context as well. In a sample of adult women exercisers, self-compassion contributed negative unique variance beyond self-esteem on introjected motivation, ego goal orientation, social physique anxiety, and obligatory exercise (Magnus, Kowalski, & McHugh, 2010). Additionally, self-compassion explained variance beyond self-esteem on shame proneness, guilt-free shame proneness, shame-free guilt proneness, objectified body consciousness, fear of failure, and fear of negative evaluation in a group of adolescent women athletes (Mosewich, Kowalski, Sabiston, Sedgwick, & Tracy, 2011).

Self-compassion seems to avoid many of the possible drawbacks of self-esteem. Self-compassion avoids harsh self-evaluation; therefore, self-centeredness, narcissism, and downward social comparison are not likely to develop along with self-compassion like they might with self-esteem (Neff, 2003b). Self-compassion allows for greater resilience and stability than self-esteem, regardless of outcome (Leary et al., 2007; Neff, Kirkpatrick et al., 2007; Neff & Vonk, 2009). Additionally, self-esteem, but not self-compassion, is positively associated with narcissism and negatively related to contingent self-worth (Neff & Vonk, 2009). Self-compassion also has a stronger negative association with social comparison, public self-consciousness, self-rumination, anger, and need for cognitive closure when compared to self-esteem (Neff & Vonk, 2009). Overall, self-compassion is especially useful when self-esteem begins to falter – during times of difficulty or failure or when one feels inadequate (Neff, 2008).

Though many athletes may fear that complacency towards their goals may come with the self-kindness and lack of harsh self-criticism associated with self-compassion, it does not necessarily result in passivity (Neff, 2003b). In actuality, those high in self-criticism are likely to
avoid dealing with problems or avoid painful feelings (Horney, 1950; Reich, 1949). Additionally, self-compassionate people are more likely than those low in self-compassion to accept responsibility for mistakes and failure (Leary et al., 2007). Further support comes from a study involving adolescent women athletes. Shame-free guilt proneness, an adaptive form of guilt (Tangney & Dearing, 2002), was positively related to self-compassion, suggesting that while self-compassion leads to an absence of harsh self-criticism for failing to reach a desired standard, it does not mean failures or shortcomings are not dealt with or noticed (Mosewich et al., 2011). Being self-compassionate provides an individual with “the emotional safety needed to see the self clearly without fear of self-condemnation, allowing the individual to more accurately perceive and rectify maladaptive patterns of thought, feeling, and behaviour” (Neff, 2003b, p. 87), which, conceptually, positions an athlete for effective stress management and adaptive appraisal and coping processes.

Though research surrounding self-compassion in athletes is scarce, important associations in terms of the adaptive functioning related to self-compassion have been found in the sport domain. Self-compassion was negatively related to shame proneness, guilt-free shame proneness, social physique anxiety, objectified body consciousness, fear of failure, and fear of negative evaluation, suggesting that self-compassion may serve as a resource for young women athletes in managing self-conscious emotions and self-evaluative thoughts and behaviours (Mosewich et al., 2011). Research focused on how young women athletes negotiate issues of muscularity and the body led to the suggestion that the promotion of a “self-compassionate muscularity” might be particularly useful in a sport context, where many women feel evaluated on both their performance and their physique (Mosewich, Vangool, Kowalski, & McHugh, 2009). Taken together, this research suggests that self-compassion may provide some protection
against negative affect, as well as regulating cognition, particularly in times of difficulty or failure. Based on this evidence, it is justified to further explore if elements of self-compassion are relevant to women athletes and evident in their coping approaches (see Study 1), examine how self-compassion is related to the stress process in sport (see Study 2), and ascertain if self-compassion can systematically effect undesirable cognitions in athletes (see Study 3).

### 1.2.3 Self-compassion as a coping resource.

Given its conceptual and empirical connection to adaptive outcomes and functionality, it is not surprising that self-compassion has been positioned within the stress and coping process. Neff and colleagues (2005) have conceptualized self-compassion as an emotion regulation strategy that may help neutralize negative emotional patterns and promote positive states of mind. A. B. Allen and Leary (2010) explore the possibilities of self-compassion in stress and coping more broadly, providing an outline of how self-compassion may serve as an effective coping resource during difficult times. Based on work by E. A. Skinner, Edge, Altman, and Sherwood (2003), A. B. Allen and Leary suggested that self-compassion may act as a coping strategy based on five main categories of coping: positive cognitive restructuring, problem-solving, seeking support, distraction, and escape/avoidance.

Self-compassion seems to share the strongest conceptual link with cognitive restructuring (A. B. Allen & Leary, 2010). Cognitive restructuring involves altering one’s view of a situation to frame it more positively (A. B. Allen & Leary, 2010). This can be accomplished by being optimistic, engaging in positive thought, and not ruminating on negative aspects of the situation (A. B. Allen & Leary, 2010). A. B. Allen and Leary highlight how self-compassion involves aspects of cognitive restructuring, as individuals high in self-compassion view negative events in a less catastrophic way compared to those low in self-compassion. They cite Neff and
colleagues’ (2005) examination of students receiving a poor midterm grade as an example. Students with higher self-compassion reported using the coping strategies of acceptance and positive reinterpretation after receiving a poor midterm grade significantly more than students exhibiting lower levels of self-compassion. An additional example is evident in work by Leary and colleagues (2007). Upon looking back at a negative event, people high in self-compassion were less likely to have negative thoughts about the self and thoughts related to questioning why such experiences always happen to them (Leary et al., 2007). Interventions, although low in number, have also successfully induced self-compassionate perspectives and beneficial effects through approaches that appear to promote cognitive restructuring (e.g., Adams & Leary, 2007; Gilbert & Irons, 2004; Gilbert & Procter, 2006; Kelly, Zuroff, Foa, & Gilbert, 2010; Leary et al., 2007; Shapira & Mongrain, 2010; Neff & Germer, 2013). These interventions will be reviewed in a later section of this chapter.

A. B. Allen and Leary (2010) have also aligned self-compassion with what they categorize as problem-solving, though problem-focused coping is the main focus. Research is mixed on the relation between self-compassion and problem-focused coping. As A. B. Allen and Leary point out, self-compassion is positively associated with optimism, curiosity, exploration, and personal initiative (Neff, Rude et al., 2007), which are predictors of problem-focused coping. However, self-compassion did not correlate with problem-focused coping strategies such as active coping, planning, suppression of competing activities, restraint coping, and seeking instrumental support (Neff et al., 2005). So while self-compassion is related to variables that suggest taking action against problems, or use of problem-focused coping, empirical testing does not provide direct support for the relation between self-compassion and problem-focused coping (A. B. Allen & Leary, 2010). However, it is possible that self-compassionate people may only
engage in problem-focused coping if they perceive that the issue can be solved by taking action (A. B. Allen & Leary, 2010).

Conceptually, self-compassion may lead to people deriving indirect social support by perceiving that they are not alone in their experiences, recognizing that others have similar issues (akin to common humanity; A. B. Allen & Leary, 2010). The realization that one is not alone reduces feelings of isolation and may promote adaptive coping (Neff, 2003a). However, self-compassion has not been shown to be related to seeking instrumental support or emotional support from others (Neff et al., 2005). In addition, self-compassionate people are no more likely than those low in self-compassion to seek out the company of others after a negative event (Leary et al., 2007). Overall, there is not much support for linking self-compassion to types of coping involving social support.

Given that self-compassion does not lead to complacency (Neff, 2003b), it should be expected that self-compassion would be unrelated to distraction and avoidance coping. People high in self-compassion are no more likely to take their minds off a negative event than those low in self-compassion. They also accept more responsibility for their actions than those low in self-compassion (Leary et al., 2007), suggesting that distraction coping is not used. On a related note, self-compassion has been shown to be negatively related to avoidance coping in students after receiving a poor midterm grade (Neff et al., 2005). These findings make sense conceptually, as the mindfulness component of self-compassion requires one to keep a balanced perspective – accepting and understanding, but not avoiding.

While the categorization of self-compassion into existing types or functions of coping remains unclear, self-compassion does appear to be useful in managing negative events. Overall, the adaptive qualities of self-compassion call for further research into functions and relations of
the construct with relevant variables and the stress and coping process, as well as the feasibility of the promotion of self-compassion in coping efforts and the resultant effects of such endeavours. This dissertation seeks to examine such issues.

1.2.4 Managing hardships in sport: The role of self-compassion.

While there are a number of positive attributes that accompany sport participation, there are many situations that can potentially cause stress (Hanin, 2010; Nicholls & Thelwell, 2010). Self-compassion may be particularly useful in managing hardships in sport. Self-kindness would allow an individual to evaluate the self without self-condemnation, promoting more accurate perceptions of the situation and a better ability to change maladaptive thoughts, feelings, or behaviours (Neff, 2003b). Self-compassion permits the acknowledgement and evaluation of weaknesses, but could allow the athlete to move on with an effective focus, avoiding excessive self-criticism and rumination (e.g., Neff, 2003b; Neff, 2009; Neff et al., 2005). A sense of common humanity would allow athletes to identify with others who share similar experiences or more easily accept support from others (A. B. Allen & Leary, 2010). Finally, mindfulness would promote a balance in expectations and standards. Neff (2003b) contends that “self-compassion should be linked to greater knowledge and clarity about one’s limitations” (p. 93). A self-compassionate perspective surrounding the body has also been acknowledged by women exercisers to involve appreciating one’s unique body, including its limitations (Berry, Kowalski, Ferguson, & McHugh, 2010). Thus, with self-compassion, effective balance and focus is promoted, as challenges are not avoided, but identified and approached in a way that achieves the best situation for the self. Overall, the effectiveness of coping is enhanced by maintaining perspective and practicing mindfulness during stressful and challenging times (Brown & Ryan, 2003; Neff, 2003b). In taking such approaches, emotions are attempted to be understood,
without the denial of reality or becoming overwhelmed (Neff, 2003b). Thus, fostering self-compassionate mind-frames seems to be a worthwhile endeavour as it promotes acceptance of the situation, yet still allows the athlete to move forward in pursuit of her best self.

**1.2.5 Interventions to foster a self-compassionate mindset.**

Transferring research constructs to applied situations requires an understanding of the best way to implement and teach the strategy. Thus, attention directed at how to successfully develop and implement self-compassionate perspectives is integral. Given the relative infancy of self-compassion, well-developed self-compassion interventions are sparse. Most research has focused on examining self-compassion in terms of basic relations and predictability among various psychological and well-being variables; however, as alluded to earlier, there have been some research attempts in self-compassion promotion, providing some foundation and direction for future endeavours. Most self-compassion interventions have been directed towards cognitive restructuring, developing skills that could be used in coping with various issues (A. B. Allen & Leary, 2010) and could influence various aspects of the stress and coping process, including appraisal and coping. This section provides an overview of interventions designed to promote self-compassion. Single strategy approaches are overviewed first (i.e., compassionate imagery, compassionate writing, and self-compassionate prompts), followed by interventions that integrate a combination of various strategies (including the above as well as additional components such as psychoeducation, therapeutic guidance, and meditation).

**1.2.5.1 Compassionate imagery.** Self-compassion has been promoted through the practice of compassionate imagery in a group of self-critical people (Gilbert & Irons, 2004). Gilbert and Irons argued that imagery is a useful approach for developing self-compassionate mindsets, as images can have powerful emotional effects on the person employing the strategy.
(Hackmann, 1998, 2005). Additionally, imagery has been associated with neurophysiological systems related to memory, thoughts, and feelings (e.g., George, Ketter, Parekh, Horwitz, Hercovitch, & Post, 1995; Schwartz & Begley, 2002). The compassionate imagery intervention by Gilbert and Irons consisted of three weekly meetings / psychoeducation sessions (with a follow-up 6 weeks later), where the nature of self-criticism was discussed and the approach of compassion towards the self and how compassionate imagery might help counter some of this criticism was outlined. Compassionate imagery was explained and practiced in a group setting and participants were encouraged to use the skill when they had self-critical thoughts. Diaries were used to monitor and collect ratings of self-attacking and self-soothing thoughts, as well as keep track of both compassionate and self-critical images. A record of critical thoughts was kept daily for a 2 week period, and then was recorded weekly. The event or trigger of self-criticism was identified, and participants were instructed to write about how the situation made them feel about themselves and also consider how those thoughts made them feel.

The ability of participants to make use of compassionate imagery varied from person to person in the study by Gilbert and Irons (2004). Some people found it easy and effective to employ compassionate imagery, whereas others struggled. The most helpful images were described as having calming, soothing, and caring effects. Images often changed with practice. This intervention, however, did not result in a significant reduction in self-critical thoughts, though there was an increase in self-soothing and self-compassion. The increase in self-soothing and self-compassion was reflected in an increased ability to generate compassionate images and heightened ability to soothe oneself in a self-critical situation. One caveat with such an approach is the aptitude of being able to generate strong images. Participants who did not find imagery useful found it difficult to bring an image to mind, hold an image, and practice it (Gilbert &
Irons, 2004), creating implications for treatment fidelity, particularly in terms of participant exposure to the treatment and quality of delivery. Overall, although this compassionate imagery approach was designed as a pilot intervention and had no control group, the authors argued that this intervention had potential merit for some self-critical individuals.

1.2.5.2 Compassionate writing. State self-compassion has been successfully induced using compassionate letter writing in a brief intervention by Leary and colleagues (2007). Self-compassion was prompted by having undergraduate students respond in writing to prompts that led them to think about a negative event in such a way that fostered self-kindness, common humanity, and mindfulness – akin to Neff’s (2003b) definition of self-compassion. Self-esteem and writing control conditions were also included in the study. Results suggest that the self-compassion induction led to lower negative affect and increased personal acknowledgement about role in the failure compared to the other conditions. Additionally, even though personal responsibility was acknowledged, negative affect was lower than in the other conditions. The compassionate writing approach seemed to be particularly effective for those already low in self-compassion. For such participants, the induction increased perceptions of similarity to others, or common humanity. However, those already high in self-compassion did not show any significant change on this variable, suggesting that initial self-compassion levels are a critical factor. This study supports that self-compassion can be effectively promoted in a non-clinical population and that writing strategies produce beneficial effects.

Self-compassion promotion through writing has also been employed in an online intervention. Shapira and Mongrain (2010) facilitated 1 week online interventions promoting either self-compassion or optimism in a large sample of the general population. Both interventions led to decreases in depression and increases in happiness up to 3 and 6 months after
the intervention, respectively, compared to a control group (Shapira & Mongrain, 2010). The intervention used a letter-writing approach similar to the one employed by Leary and colleagues (2007). In the self-compassion condition, the participants wrote a letter to themselves from the perspective of a friend. The focus was on understanding and accepting distress and providing nurturing support. The optimism condition focused on imagining a positive future in a variety of domains. The control condition involved writing about an early memory in detail. Contrary to hypotheses, it was the optimism condition, not the self-compassion condition, that curtailed self-criticism. However, this finding held only in older and less depressed participants. The authors suggested that the significant finding in the optimism condition could be due to optimism directing attention away from negative rumination and focusing on the positive (Shapira & Mongrain, 2010). However, the authors were not confident in the study’s conclusion, as repeated measures analysis supports effectiveness of the optimism condition for self-critical individuals, but multi-level modelling analysis did not mirror the findings. While self-compassion itself was not affected by this intervention, positive outcomes from the self-compassion condition were still apparent, as evidenced by sustained increases in happiness and decreases in depression.

1.2.5.3 Self-compassion verbal prompts. Promotion of self-compassion through verbal prompts has also been explored. A self-compassion verbal prompt was delivered by a researcher after women high in restrictive eating and/or eating guilt were asked to eat an unhealthy food (Adams & Leary, 2007). Restrained eaters tend to overeat after an incidence of eating an unhealthy food, compared to normal eaters (Herman & Mack, 1975). Self-compassion promotion provided successful protection against negative self-thoughts, affect, and self-criticism connected to eating the preload condition. However, the self-compassionate prompt
attenuated eating in a subsequent test in the group of restrictive eaters, but not the guilty eaters (Adams & Leary, 2007). Working from the premise that negative self-thoughts and emotions lead to disinhibited eating, reducing the negative self-evaluation and self-criticism tied to the event might protect against a subsequent unhealthy episode (Adams & Leary, 2007). The lack of effect of self-compassion in the eating guilt group might suggest that this short term intervention is more effective for behaviour (restrictive eating) than emotions/affect/thoughts (eating guilt). The authors suggest that perhaps a longer term intervention is necessary for changing thought patterns (Adams & Leary, 2007), at least in terms of issues surrounding eating.

**1.2.5.4 Self-compassion intervention employing multiple approaches.** While self-compassion promotion had been approached through the use of single, specific strategies, the majority of interventions integrate a combination of approaches to foster self-compassion, as alluded to with the psychoeducation component to the compassionate imagery intervention described earlier. Particular programs, specifically Compassionate Mind Training (Gilbert & Procter, 2006) and the Mindful Self-Compassion Program (Neff & Germer, 2013), as well as intervention studies focused on targeting specific populations or issues through promotion of self-compassion by multiple approaches are outlined in the remainder of this section.

Compassionate Mind Training is an intervention involving multiple self-compassion promotion strategies designed to help individuals high in shame and self-criticism find self-acceptance and become more self-compassionate (Gilbert & Procter, 2006). Compassionate Mind Training is based on the foundation that when people experience failure or when things go wrong, they may fear the consequences, engage in self-criticism, and fail to self-soothe and self-reassure (Gilbert & Procter, 2006). Compassionate Mind Training does not attempt to change specific core beliefs or schemas, but focuses more on altering an individual’s orientation to the
self. Setbacks and failures are acknowledged and given compassion, including the
disappointment and fear associated with the event, and Compassionate Mind Training helps the
individual to not only accept, but tolerate and work with that fear by being empathetic and
tolerant of one’s distress. Feelings are acknowledged as understandable, so acceptance and
soothing, rather than attacking self-criticism, are provided and individuals learn to respond in
new ways to the self, events, and reactions. Compassionate Mind Training is designed to allow
for understanding of the sources of distress and the ability to be self-soothing during setbacks,
failures, and disappointments.

The Compassionate Mind Training approach is intensive and rooted in clinical
background, but shows promise as an additional resource for patients with chronic difficulties or
from traumatic backgrounds (Gilbert & Procter, 2006). These skills are taught through
compassionate imagery, reframing, and compassionate writing exercises, as well as through
therapeutic guidance. Compassionate imagery in this context involves individuals choosing a
personal image, one that embodies compassion for them. When self-critical thoughts arise, the
individual is asked to focus on the image and ask what this compassionate image would say to
them, which compassionately reframes the situation (Gilbert & Procter, 2006). Writing letters to
oneself from the perspective of a compassionate outsider is an additional component, where the
focus is on empathy, care, and attention towards the self that is applied to both thinking and
behaviour.

Gilbert and Procter (2006) examined the effectiveness of Compassionate Mind Training
with a clinical group of people high in shame and self-criticism over the course of 12 weeks.
The first few weeks involved exploring the nature of self-criticism, explaining the rationale
behind Compassionate Mind Training, and introducing the idea of self-compassion to the
participants. Group discussion on what compassion entails was also a component. Fears of self-compassion were acknowledged, and the nature of self-attacking was also given focus. Participants were provided with a list of qualities of self-compassion that were the target for personal development. There were significant reductions in depression, anxiety, self-criticism, shame, feelings of inferiority, and submissive behaviour upon completion of the 12-week program. Self-soothing and self-reassurance were increased, while no change was seen in self-correcting criticism. However, the lack of change in self-correcting criticism may be seen as a positive, as it may simply indicate that people continue to try to correct faults, while the self-persecution, feelings of inadequacy, and self-hatred aspects of self-criticism still decline. Although once again there was no control group, this study provides details on approaches that appear to influence self-criticism.

The Mindful Self-Compassion Program is modeled after Mindfulness-Based Stress Reduction (see Kabat-Zinn et al., 1992) and is designed to enhance self-compassion using a variety of approaches (Neff & Germer, 2013). The program has shown promising results (Neff & Germer, 2013). The focus of the Mindful Self-Compassion Program is on fostering self-compassion, with mindfulness development as a secondary focus. Participants meet once a week for 8 weeks, as well as engage in a half-day meditation retreat. Structure consists of formal meditation and informal self-compassion exercises. Experiential exercises, discussion, and homework assignments are used, with the goal of having the participants develop resources and integrate skills into their daily life in a way that is relevant to them. This intervention produced significantly greater gains in self-compassion, mindfulness, compassion for others, and life satisfaction, while decreasing depression, anxiety, stress, and avoidance in a community sample. These changes were maintained over a 1 year period. Formal meditation and self-compassion
skills were found to increase self-compassion levels, suggesting this self-compassion can be fostered with the Mindful Self-Compassion Program.

Self-compassion intervention has also been adapted for specific targets and populations. Kelly and colleagues (2010) designed a 3 week intervention that employed a psychoeducation component explaining the premise of self-compassion, as well as compassionate imagery, compassionate letter writing, and self-compassion promotion skills to foster self-compassion as a regulatory aid in smoking cessation. Self-criticism remained a key target in this intervention as self-regulatory attempts, such as smoking cessation, that are accompanied by self-criticism stimulate a threat response, making it difficult to elicit feelings of control. As a result, it is more difficult to resist the challenging self-regulatory behaviour (i.e., resisting a cigarette). Self-criticism might also decrease motivation for change (Kelly et al., 2010). Results suggest that Kelly and colleagues’ self-compassion intervention reduced the incidence of daily smoking significantly more than a self-monitoring condition (used as a baseline). However, two other imagery-based self-talk conditions (a self-energizing intervention and a self-controlling intervention) produced similar results.

The self-compassion intervention developed by Kelly and colleagues (2010) was most effective among smokers who were low in readiness to change, able to produce vivid images, and high in self-criticism. The authors suggested that self-compassion might appeal more to those low in readiness to change, as supportive mindsets and perspectives focusing on caring for the self are fostered. Additionally, the possible fears of impeding goal progress would not be as applicable in this low readiness group as it might be in a more motivated group. This speaks to the importance of justifying self-compassion approaches and providing specific justification and evidence for why self-compassion can be of benefit in terms of progress, and not a hindrance.
Kelly and colleagues also attest that imagery vividness may play a role in intervention success, citing research suggesting that individuals who can draw upon a compassionate image benefit both physiologically and psychologically (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008; Pace et al., 2009). The more vivid the image, the more self-regulatory benefit (Kelly et al., 2010). Recall the work by Gilbert and Irons (2004) regarding potential issues that arise when imagery skills are lacking. In their work, imagery usefulness seemed to relate to imagery ability. Thus, imagery ability appears to be a key factor influencing effectiveness of interventions employing self-compassionate imagery. When evaluating their self-compassion intervention in its entirety, Kelly and colleagues posit that, for individuals high in self-criticism, applying self-compassion to an area of goal progress may inhibit ruminative and self-judgmental tendencies when faced with setbacks and challenges associated with that goal. Feelings of support and tolerance are promoted, rather than threat and pressure. Once again, self-compassion appears to show particular promise with self-criticism.

While some approaches to self-compassion induction are quite intricate and time-consuming (e.g., Compassionate Mind Training), research has begun to establish individual strategies and skills to foster self-compassionate mindsets, such as compassionate writing and compassionate imagery and reframing exercises. Strategies such as imagery, writing, and psychoeducation are techniques commonly used in the sport domain and hold promise in terms of adaptation geared towards the goal of promoting self-compassionate mindsets among athletes.

1.3 Applying Self-Compassion in Sport

Sport is a unique context that presents many issues, challenges, and pressures for athletes (Hanin, 2010). Negative events can arise in many forms including failures, setbacks, challenge, and evaluation. Pressure can even accompany success. Athletes have to deal with these
challenging circumstances to reach their achievement goals; however, athletes often differ in how they respond to these experiences (Lazarus, 2000; Nicholls & Polman, 2007). Providing athletes with the skills and resources to help them effectively deal with different sport situations will not only help athletes respond in an adaptive manner, but will also help to promote positive sport experiences.

Self-compassion appears to have potential application in the sport context and warrants further exploration, particularly in how athletes deal with negative events. Empirical evidence suggests self-compassion is associated with a variety of adaptive outcomes and constructs (see Neff, 2009 for a review), including sport-relevant constructs among female athletes (Mosewich et al., 2011). These adaptive associations would help to promote successful, positive, and enjoyable sport pursuits for athletes. Additionally, and even more importantly, research also suggests that self-compassion can be fostered (e.g., Adams & Leary, 2007; Gilbert & Irons, 2004; Gilbert & Procter, 2006; Kelly et al., 2010; Leary et al., 2007; Shapira & Mongrain, 2010; Neff & Germer, 2013), setting up self-compassion as a viable resource for athletes.

Women athletes in particular are a viable target for self-compassion promotion. As a whole, women tend to exhibit lower self-compassion (Neff, 2003a; Neff et al., 2005; Neff & McGehee, 2010) compared to men, and also face unique challenges in the sport domain. The sport context can be highly evaluative, and women athletes have attested to the difficulties in managing demands surrounding both appearance and performance (Greenleaf, 2002; Krane, Stiles-Shipley, Waldron, & Michalenok, 2001; Mosewich et al., 2009). Self-compassion may help with management of certain sport-related demands, given it is most relevant during negative events such as setbacks, failures, challenges, and evaluation (Neff, 2003b).
Despite the potential merit of self-compassion as a coping resource for women athletes, there are key questions still to be answered regarding the evaluation of the usefulness of self-compassion in sport. As an initial step, the relevance of self-compassion in dealing with sport-related issues needs to be further explored, and the fit of self-compassion within the stress and coping process in the sport domain needs to be examined. Should self-compassion continue to show empirical connections to important and relevant sport-related issues, application of self-compassionate approaches in sport would be more justified and directed. Such a foundation would allow for further exploration into the potential of self-compassion as a resource in sport on an applied, practical level. The move to applied research requires establishment if the construct can be promoted in the sport context with beneficial effects, and strategies of implementation must be empirically evaluated.

1.4 General Overview of Purpose and Objectives

The purpose of this dissertation was to further understanding of self-compassion in women athletes managing challenging situations in sport. Key focuses included the fit of self-compassion within the stress and coping process, relation of self-compassion with sport-relevant variables, and self-compassion intervention effectiveness with women athletes. Three studies were completed to advance these goals.²

The objective of Study 1 was to better understand setback experiences faced by women athletes, as well as determine if elements of self-compassion were relevant to women athletes and evident in their coping approaches. Through exploration of these experiences using a

² Studies were performed sequentially, as such, early work in this dissertation informed the later work, while still being directed by previous conceptualizations and empirical research in the area. As such, general purposes / objectives are presented here, with more specific hypotheses presented in subsequent chapters, presented within the context in which they were developed.
phenomenological approach, the purpose was to identify relevant setbacks experienced by high performance athletes, as well as resultant coping efforts. Athlete perceptions of effectiveness of coping strategies were also explored. Gaining a better understanding of how athletes approached and coped with setbacks was seen as a step towards evaluating the quality of athletes’ current coping skills and strategies and better understanding the issues faced by women athletes.

Study 2 was designed to further understand the association between self-compassion and the stress and coping process in sport. The main objective of Study 2 was to explore the ability of self-compassion as a prospective predictor of aspects of the stress and coping process, specifically appraisal processes, coping, and affect in a specific competition. Also, given that self-compassion is often conceptualized as a buffer, particularly surrounding negative events, thoughts, and behaviours (e.g., Leary et al., 2007; Neff, Kirkpatrick et al., 2007; Magnus et al., 2010; Mosewich et al., 2011), the role of self-compassion as a moderator on the relation between goal progress and elements of the stress and coping process was also explored. Such work allowed for a systematic understanding of the role or fit of self-compassion within the stress and coping process.

The primary objective of Study 3 was to determine if a self-compassion intervention fostered self-compassion as well as reduced self-criticism, negative ruminations, and concern over mistakes among women athletes. The effectiveness of this self-compassion intervention was investigated using a randomized control trial.
Chapter 2: Managing Injury and Other Setbacks in Sport: Experiences of (and Resources for) High Performance Women Athletes

2.1 Introduction

Within high level sport, athletes face numerous demands that can hinder advancement towards desired achievement goals. These demands can include personal and significant others’ expectations, training and competition, physical and mental issues, sport organization problems and politics, travel, media issues, interpersonal relationships and conflicts, distractions, and dealing with injury (see Crocker & Graham, 1995; Gould, Finch et al. 1993; Hanton & Fletcher, 2005, Holt & Hogg, 2002; Udry, 1997). Stress occurs when there is a perceived imbalance between demands and resources (Lazarus & Folkman, 1984). Optimal functioning in high level sport requires that athletes have the ability to cope with stress to achieve their personal goals (Gould, Eklund et al., 1993; Hardy, Jones, & Gould, 1996; Lidor, Crocker, & Mosewich, 2012).

Setbacks occur when an event is appraised as impeding progress towards desired goals and can be experienced as a source of stress. Setback experiences in competitive sport can

---

3 Chapter 2 is a version of a manuscript of an article whose final and definitive form, the Version of Record, has been published in Qualitative Research in Sport, Exercise, and Health (date of publication online: February 12, 2013; copyright Taylor & Francis), available online at: http://www.tandfonline.com/[doi:10.1080/2159676X.2013.766810]. The citation is as follows: Mosewich, A. D., Crocker, P. R. E., & Kowalski, K. C. (2013). Managing injury and other setbacks in sport: Experiences of (and resources for) high performance women athletes. Qualitative Research in Sport, Exercise, and Health. Advance online publication. doi:10.1080/2159676X.2013.766810
include poor performance, injury, or an unwanted/unplanned competitive outcome (Haglind, 2004; Nicholls, Holt, Polman, & Bloomfield, 2006; Pocwardowski & Conroy, 2002; Udry, 1997). Coping mechanisms employed to deal with setbacks range in effectiveness and include positive appraisal, focusing on the future, analysis of the event, discounting negative thoughts, seeking social support, planning, adhering to pre-determined routines, setting goals, taking time away from sport, keeping a balanced perspective, regulating emotions, increasing effort, and targeting weaknesses and strengths (Haglind, 2004; Nicholls, Holt, & Polman, 2005; Pocwardowski & Conroy, 2002).

Effective coping is suggested to accompany positive performance in high level sport (Nicholls, 2010); however, athletes do not always consider their coping attempts to be effective (e.g., Nicholls et al., 2006). Athletes who have not developed effective coping skills to deal with the high demands of sport might experience less than optimal performance, poor social functioning, high distress, low positive affect, and sport drop out (see Hoar et al., 2006; Neil, Mellalieu, & Hanton, 2009; Nicholls, 2010; Nicholls & Polman, 2007; Nicholls, Polman, & Levy, 2012). Revisiting how athletes perceive and experience setbacks can be useful in understanding the issues they face, as well as explore what they find to be effective and ineffective coping, including less traditional coping approaches. Information of this nature will allow for the identification of potential areas of need, directing further development of resources for stress management, as well as identifying new, unique approaches for athletes to add to their coping repertoire. This is a step towards ensuring future research, support, and learning initiatives are properly directed to meet athletes’ needs, fostering healthy sport experiences and fulfillment of athletic potential.
Mindfulness and self-compassion are relatively new to the field of sport psychology, but these approaches hold promise in coping and stress management in the sport domain. Interventions based on mindfulness and acceptance focus on improved coping skills by developing a mindful, or nonjudgmental acceptance and awareness of cognitions, emotions, and physical feelings, rather than attempting to change, suppress, or control them (Gardner & Moore, 2004). The focus is on goals and task-relevant information and is directed through Mindfulness-Acceptance-Commitment approaches (Gardner & Moore, 2004). Other avenues include Mindfulness-Based Cognitive Therapy (e.g., Segal, Williams, & Teasdale, 2002) and Mindfulness-Based Stress Reduction (e.g., Kabat-Zinn et al., 1992). Although mindfulness approaches originate from a clinical setting, Gardner and Moore (2004) have acknowledged their potential application in sport. Additionally, despite the relative infancy of mindfulness application in sport, empirical support is present, as training based on mindfulness and acceptance has been promising among youth golfers (Bernier, Thienot, Codron, & Fournier, 2009).

Self-compassion has received limited attention in the sport domain as a coping resource to manage stressful experiences, but acts as another example of the potential for new, novel coping approaches to be adapted and applied in sport. Self-compassion involves promoting kindness and understanding, as opposed to harsh self-criticism, during experiences of failure (Neff, 2003). Self-compassion has been suggested to be a promising approach to help regulate cognition and emotion in the sport context (Mosewich et al., 2009, 2011), showing potential as an additional coping resource for athletes. Exploring how mindfulness and self-compassion fit into the stress and coping experiences of high performance women athletes will not only lead to
a better understanding of athletes’ experiences, but may also identify new stressors, strategies, and information about coping skills and effectiveness in the current athletic climate.

Folkman and Moskowitz (2004) attest that a reason for studying coping is to identify effective and ineffective coping that can aid in coping intervention efforts. When considering coping efforts and resultant effectiveness, the role of context should not be overlooked (e.g., Crocker, Mosewich, Kowalski, & Besenski, 2010). As coping is context specific, it is important to consider the experiences and needs of specific populations to further tailor intervention approaches. Young women athletes competing in high performance sport potentially face an array of stressors, yet little research has focused exclusively on this group. On a global level, women athletes tend to perceive less control over stressors (Hammerstein & Burton, 2004) and report more communication, coach-related, and teammate stressors than male athletes (Anshel, Sutarson, & Jubenville, 2009; Nicholls et al., 2007). Women athletes also typically display more emotion-focused coping strategies than their male counterparts, who have been found to engage in more problem-focused strategies (e.g., Anshel, Porter, & Quek, 1998; Campen & Roberts, 2001; Goyen & Anshel, 1998; Hammerstein & Burton, 2004). However, research is equivocal, as Nicholls and colleagues (2007) found that women undergraduate athletes used more problem-focused strategies than male athletes. Other research has found no gender difference on problem-focused coping, though women athletes still showed more emotion-focused coping (e.g., Crocker & Graham, 1995; Kolt, Kirkby, & Lindner, 1995). Nonetheless, the point remains that there are likely differences in the way men and women cope (Hoar et al., 2006). Having a more clear understanding of the context surrounding experiences of stress and coping is warranted in order to provide effective resources, and essential in evaluating the role of new constructs under consideration, such as mindfulness and self-compassion.
The purpose of this study was to further understand young high performance women athletes’ experiences with setbacks using a phenomenological approach. Through exploration of these experiences, it was endeavoured to identify relevant setbacks experienced by high performance athletes, as well as resultant coping efforts and athlete perceptions on effectiveness of coping strategies. Gaining insight into how these athletes approached and coped with setbacks is a step towards evaluating the level and adequacy of athletes’ current coping skills and strategies.

2.2 Method

2.2.1 Participants.

Five young women athletes in their early to mid-twenties participated in the study. All athletes could be classified as high performance; that is, they all competed in their respective sport(s) at university, national, and/or international levels. Each had her own personal experiences with setbacks. To preserve the participants’ confidentiality, each woman will be identified by a pseudonym. The women athletes, Alixe, Cindy, Erin, Jessica, and Sarah, were currently or recently involved in bobsleigh, field hockey, soccer, swimming, and track and field. As there may be gender differences in coping in some sport contexts (Hoar et al., 2006, Kaiseler & Polman, 2010), focusing solely on women athletes provided an occasion to explore coping preferences and experiences specific to this group.

2.2.2 Procedure.

Coping is complex, given its dynamic, multifaceted, and contextual nature. To capture this complexity, stress and coping questions, such as those posed in the current study, can lend themselves well to qualitative approaches (Crocker et al., 2010). A phenomenological
orientation provided a descriptive focus of the women athletes’ lived experiences, gleaning insight and understanding of those events. Such an approach fits well with the purpose of the study, as it aids in understanding participant perspectives and meanings connected to a particular concept (Kvale, 1996), much akin to hermeneutic phenomenology (Allen-Collinson, 2009; Van Manen, 1990). This approach enabled each athlete to share her individual experiences in detail, which is important as we sought to explore athletes’ experiences with setbacks, including coping approaches and their perceived effectiveness. Lazarus (1999) has suggested that “a greater use of personal narratives would be useful” (p. 9) in understanding coping mechanisms. Additionally, Neil and colleagues (2009) suggested qualitative approaches would be helpful in further understanding competitive stress.

After ethical approval was obtained from the University Behavioural Research Ethics Board, recruitment posters were displayed in athletic facilities on a large Canadian university campus seeking high performance women athletes willing to talk about setback experiences in sport. Six athletes initiated contact via email expressing interest in the study. Five athletes were interviewed, as preliminary discussion with the sixth athlete regarding level of sport involvement led to the mutual conclusion that she did not meet the criterion of being a high performance athlete (i.e., her participation in sport was at a local club level). Detailed interviews with a small, select group of athletes were arranged as an in-depth understanding of high-performance athletes’ experiences was desired (Moustakas, 1994). Small sample sizes are common in phenomenological studies, as the interviewing, transcription, and analysis is an involved and intensive process, and the potential of phenomenology is still obtained with small sample sizes (J. A. Smith, 2011). Once informed consent was obtained (see Appendix A for consent form), each athlete participated in a one-on-one interview.
2.2.3 Interview guide.

Interviews followed a semi-structured interview guide (see Appendix B), and were audio-recorded and transcribed verbatim. Interviews ranged from approximately 50 to 100 minutes in length. Sessions began with an overview of the consent form, a discussion of the ethical limits of confidentiality, and an outline of the upcoming interview. The interview then moved to general questions about the athlete’s sport experiences, such as involvement, length of time in sport, level of sport participation, and reasons for sport participation. These initial questions were designed to gain understanding about each participant’s background in sport, as well as to build rapport. Subsequently, the primary goals of the interview were to gain understanding about (a) setback experiences faced by high performance women athletes, (b) how athletes approached and managed these setbacks, and (c) their perceptions of these efforts.

2.2.4 Data analysis.

Interviews resulted in 96 pages of single-spaced transcripts. Thematic analysis allowed for reduction and categorical aggregation through looking at significant statements, meaning units, interpretation of meaning, and themes of meaning (Creswell, 1998, 2003; Morse & Richards, 2002). This follows a general structure of phenomenological study designed to understand and describe the athletes’ experiences (Creswell, 1998). In order to find meaning, direct interpretation of individual experiences, as well as aggregation of experiences, was explored. Patterns that emerged were then grouped together to form themes. It was attempted to portray the information in a meaningful way through looking at the instances and experiences from both an individual and collective level (Van Manen, 1990). These themes helped to portray the participants’ experiences with setbacks in sport, allowing us to better express the athletes’
experiences with setbacks and their attempts to cope with setbacks in sport, and where there may be a lack in resources.

2.2.5 Credibility.

Judging research quality is a unique task, and one that cannot always follow strict pre-set criteria (J. Smith, 2009; Sparkes & Smith, 2009). This being said, reflection and disclosure on the part of the researcher are important. A number of steps were taken to increase the credibility of the study. The interview guide was piloted with two women (one current and one former competitive athlete), who provided feedback about the construction and delivery of the interview, such as semantics and timing/ordering of questions. The current athlete provided an opportunity to garner feedback from someone currently involved in the sport context, while the former athlete offered a chance to comment from a place of experience. The former athlete also had experience in research in sport psychology, which allowed for a slightly different perspective and ability to comment from the view of both athlete and researcher. Changes to the interview guide were made according to their suggestions. Appropriate sampling was then used to obtain participants best suited to answer the research question (Morse & Richards, 2002). Purposeful sampling resulted in high performance athletes who had experienced setbacks in sport volunteering to share their experiences. Rapport was built between myself (in the interviewer role) and the participants during communication prior to the interview, as well as during the start of the interview, in which a trusting, understanding environment was created. To create a sense of community, I offered some general information about myself, including my sport background. Appropriate pacing of interview questions was a constant consideration, with care being taken to have the athlete share her story in a comfortable atmosphere. The semi-structured interview guide allowed for some flexibility in delivery of the interview questions, allowing the athletes to
have input in the direction of their sharing. Participants had the opportunity to add additional comments or to clarify meanings during the interview. Each participant also had the opportunity to member check her transcript. Continued verification and confirmation during the coding process, with recoding and relabeling as necessary if a category was not an appropriate fit, further increases confidence in the study. For example, such a procedure allowed for the development of performance plateau as an experience separate from that of merely poor performance. Finally, the design used was driven by the research question, which strengthens the study by incorporating appropriate approaches and methods to best achieve the research objectives, lending to the methodological coherence of the study (Mayan, 2009). Enhancing methodological coherence helps to ensure “congruence between your epistemological and ontological viewpoint, your theoretical perspective, your research question, and so on” (Mayan, 2009, p. 13).

2.2.6 The researcher in the research study.

Prior to conducting the interviews, I reflected on my personal experiences and thoughts about coping with setbacks. My background in sport as an athlete, and the shared experiences of setbacks that coincides with the athletic involvement, led to a connection with the athletes in this study. This connection prompted empathy, and a desire for athletes’ experiences to be heard, as many of their difficulties were closely mirrored by my sport experiences. Empathy promoted understanding and a personal connection to these stories. While the connection provided a good foundation and context for understanding and honouring the experiences of the participants, care had to be taken for me not to merely see my own experiences, or those of others close to me, in the participants’ stories. Transcripts and notes were consulted in detail to ensure information was not overlooked, and that themes were well justified. This reflection, as well as reflexivity,
continued throughout the research process. Engaging in reflexivity is an important component of trustworthiness in qualitative research that enables researchers to consider personal experiences that may influence interpretation of the findings (Ely, 1991). Researcher, participant, and audience reflexivity, as well as personal and professional meanings, were considered to ensure I, as the researcher, had an awareness of these influences on the research process (Brocki & Wearden, 2006; Gilgun, 2010). Acknowledging similarities between the participants’ stories and my own sport experiences, as well as acknowledging unique aspects, allowed me to more deeply explore the meanings of the situations experienced by each athlete and provided a starting point for consideration, understanding, and expression of the athletes’ experiences (Van Manen, 1990). Additionally, the shared experiences may have allowed for more relevant, direct probes, promoting a sense of being understood from the perspective of the participant, as well as increased depth of contribution in those areas.

2.3 Findings

2.3.1 Setback experiences.

Three themes emerged as common setback experiences: (a) poor performance, (b) performance plateau, and (c) injury.

(a) Poor performance

Poor performance was difficult to accept and manage, especially given the level of investment the athletes put into their sport. Athletes felt both internal and external pressures to perform to certain standards, and performing below these standards was identified by every athlete as a setback. Participants acknowledged experiencing feelings of frustration during periods of poor performance. One athlete responded to an episode of poor performance with anger and needed to take some time off after the season ended. The athlete described this as
necessary because “…you just kind of have to reset your mind” (Erin) or refocus after such an experience.

While time off was seen as a potentially positive endeavour, as a chance to clear your head, try new things, and find a better balance, temporary removal from sport was difficult at times. One athlete explained that while it was important to feel like a “real person”, have more aspects to life than being an athlete, and step away from the demands of sport for a short period of time, it was important to return to training with intensity:

“I think at the beginning taking time off was very effective ‘cause you kind of do other things… you know, you kind of feel like [sport] is not the only thing in your life and that, if you fail, that it’s not going to be terrible. And I think that was good. And then after that, I think it’s really important to go hard on your training as soon as you’re back… It’s not an ease into it thing; you either do it or you don’t.” (Erin)

Moving past poor performances required readjustment of focus. Looking forward, rather than dwelling on the past, was identified by all athletes as effective.

“If you didn’t have a great game, or even a great season, you weren’t able to reach your personal best, or whatever the criteria might be, I think that, if you can kind of look past that and try to look at some of your prior successes or future outlook, you would be able to deal with that fact. But if you were super tunnel minded and could only see the one thing in front of you, I think you could maybe learn to broaden your scope. Easier said than done.” (Sarah)

While looking forward and readjusting focus was seen to be an effective approach to deal with poor performance, it was a difficult objective to attain for these athletes.

(b) Performance plateau

“That is such a scary concept, to not be able to improve anymore.” (Erin)

Performance plateau was a commonly identified setback and acknowledged by four of the five athletes. These athletes found it frustrating to put so much effort, time, and commitment
into their sport, but cease to improve. Fast improvement followed by a plateau was difficult to deal with, as the athletes were working hard and wanted to keep improving. While plateau could be justified for a period of time, eventually, this stall in progress led to frustration and confusion.

“Early in the season, you are learning new stuff, you freeze and you unfreeze and you learn new aspects or techniques. But then, it’s just like, okay well I trained for 8 months and now it’s time to compete, so… my freezing should be over, my plateaus should be over, all the stuff that I learned should be contributing to something greater.” (Erin)

More negative emotions arose if the plateau coincided with improvement in training-related activities (e.g., strength gains in weight-training not translating specifically to sport performance). An example lies in Erin’s statement, “All my lifts are up, everything’s up, so why aren’t I [performing better in sport]? … I just wasn’t getting any better”.

Inevitably, the lack of progress led most athletes to be self-critical and question what they were doing wrong, their ability as athletes, and if it was still worth continuing in sport, wondering if they had reached their peak. This is illustrated by Jessica’s comment: “There’s definitely a ceiling effect too where you just will eventually improve less and less and less. But it’s like, what is your ceiling?”.

Eventually, the anger and/or frustration gave way to reaching a more patient state of mind after realigning plans and goals. For some, this required a temporary step away from competitive sport and/or redirecting energy into other pursuits, similar to the situation with poor performance.

(c) Injury

Injury was by far the most prevalent setback the athletes discussed. Injury dominated much of the conversation for each of the five athletes; thus, to reflect their experiences, this section takes up a similar proportion of space. Athletes voiced their frustrations surrounding the
perception of being held back from progressing, even though they still felt the need to pursue their goals, making it difficult to hold back. Many athletes felt that their progress had not only been stalled due to the injury, but had also declined.

“To take so many steps backwards… Yeah, it was hard.” (Alix, on her sport progress during injury)

The perception of athletic progression being stalled or set back was a difficult reality to face for many of the athletes. Rehabilitation and modified activity were seen by a few of the athletes as having nothing of future benefit to them in terms of sport performance and their future goals.

“You feel like what you’re doing isn’t even relevant to what you’re doing.” (Erin, on her modified training during injury)

Along with the concerns about progress, there was an issue with feelings of aimlessness and disorientation over having lost the sport routine.

“I think for me, it’s like, at some point I really learned to love running, like even on the basic level of going for a run. And when that is taken away from you, you are just like, ‘What am I supposed to do?’” (Jessica)

“Being injured… it’s so debilitating. You don’t know what to do with yourself.” (Erin)

There was often a struggle with adhering to advice. One athlete admitted to engaging in physical tasks from which she was prohibited, and noted the inner struggle with herself over her decisions. The drive to keep training and competing, despite the injury, prevailed:

“There is that kind of small nigglng concern of ‘you’re really not supposed to be doing this’ and, ‘nobody really knows you are not supposed to be doing this, what the hell are you thinking?’ somehow that usually gets suppressed when I end up going out to play.” (Sarah)

The athletes voiced that they knew they needed to listen to professional advice, but it was a struggle. They knew modification was necessary and they could not train at their normal capacity, but still felt a strong need to maintain their regular training regimes.
“It’s kind of weird when you can’t exactly but you still think you should.” (Sarah)

“Even though I do know the logic behind it, I can’t even tell you what it is. It’s like you need to be on the field, you need to be playing, training… not on the exercise bike.” (Sarah)

To the athletes, the injury highlighted that they were “not invincible” (Cindy) and put them “back at square one” (Cindy). The injury experience was further compounded by frequent feelings of isolation and forced complacency, self-blame, and incompetence.

Many athletes voiced feeling isolated and alienated from the team as a result of their injury. They were often no longer training with the team or training group in their normal routine, now required to spend more time in physiotherapy. One athlete noted a complexity underlying her feelings.

“I don’t know why I should feel alone, because you’re not the only person in the world to get injured … but I felt like that when I was injured. I felt really alone. I was taken away from my training group; you are taken away from your training partners and you have to kind of do all of your workouts in solitude and you go to physio by yourself… And I guess, I feel really alone, but it’s kind of when you have your [largest] support group… your physio, your massage [therapist], your family, your friends, all trying to work you back up… but… it feels like no one else has ever gotten hurt before, ever… when you’re hurt. ‘Cause you’re like, ‘oh no one has ever gotten this badly hurt’. But everyone gets hurt… and then they come back. But at the time, you just don’t see it; it’s just not there.” (Cindy)

There were feelings of incompetence that accompanied the injury experience. For most, injury changed their capacity to perform. For some, this led to the realization of what they could do when healthy and how they took it for granted.

“You kind of feel isolated, incompetent, when you can’t do something that you could do a million times in your sleep.” (Sarah)

“And you’re just so limited… It’s such a basic thing that you take for granted until you can’t do it anymore.” (Jessica)
Self-blame was also experienced by most of the athletes. While a variety of reasons for the injury were provided (including training error, accident, programming error, and overtraining), most athletes still had one finger also pointing back at themselves.

“Blaming myself, why didn’t I see this coming? Why didn’t I stop [training and competing] sooner? That is always a big one. Maybe it wouldn’t have been as bad if I had stopped when it first started. It was just kind of like… blaming yourself.” (Jessica)

The many unknowns that come along with injury (e.g., often not knowing exactly what was wrong, or how long it would take to heal), as well as self-doubts (e.g., being unsure if a return to the same performance ability was possible), were difficult concerns for the athletes:

“The hardest part about [the injury] was the not knowing what was wrong for a long time.” (Alixe)

“You’re on crutches, you’re at physio, you’re always trying to come back to where you were and there is always that stigma… will you be as good? Will you come back and even do anything worthwhile? Or is it just gonna be a waste of your time and you’re just hoping that you are going to be good again?” (Cindy)

The questioning and perceived reactions by others were other issues. Answering questions about the injury and recovery and interacting with people perceived as not understanding her situation were expressed as exhausting by many of the athletes.

“They don’t get it… they’re just like, ‘Oh well go bike, go swim, why do you need to play?’” (Sarah)

Fear of reinjury was prevalent amongst the athletes, with the slow return to normal training described as “like walking a tightrope” (Alixe).

“I think fear of reinjury is probably the biggest part. Reinjury is huge…” (Alixe)

Unfortunately, three of the athletes experienced reinjury, which was again reflected as an extremely frustrating and despairing experience. The athletes’ progress was impressive prior to initially getting hurt, they worked hard to get back to their pre-injury state, and then they experienced reinjury, only to have to start the rehabilitation process again.
The frustrations surrounding injury and the accompanying setbacks are understandable. The athletes invest much time and effort into training and competition, and exude so much passion for their sport, that such emotions were a struggle. Despite the negative affect, the athletes voiced taking joys out of the small steps in progress, as recovery from injury often occurred in minimal increments. For many, this involved reappraisal of the situation and a realignment of goals.

“It was frustrating because I couldn’t play … but, I never really experienced anything to that magnitude before, so I kind of took little joys in the small steps of rehab.” (Sarah)

“It’s acknowledging the small things that maybe before weren’t a big deal… taking credit for the things that you do that were better than they were before. Not necessarily before you got hurt, like the day before, the week before, the month before.” (Alixe)

While the need for adjustments to training and progression was a struggle to accept at first, it was something most athletes found themselves eventually accepting. Although often difficult to accept, they tried to take pride in doing what they could at that point in time, on any given day. Athletes’ increased self-awareness that came along with injury helped one athlete negotiate when to back off, and these skills were useful upon returning to regular training as well.

“I would [do] my workout, which was, in the beginning, however much I could do; however much I felt was okay for the day. My body tells me ‘okay that’s enough’… Now I’m very picky, maybe I won’t do [certain drills]. We modify a lot of sets now. Well, like, today that is not a good thing for me to do, but maybe tomorrow it will be fine. And maybe the day after will be fine. But I really can’t do that today… Just being able to say, ‘ya I can’t do that today, but that is okay. There are other things that I can do’.” (Alixe)

Training regimes were not the only aspects of the athletes’ lives that needed to be changed. With injury came the reality that goals would have to be adjusted based on present
progress. Living in the present was facilitated by focusing on just being happy to be back participating in the sport, but potentially needing to let go of past goals was still a difficult process; however, in time, the athletes were able to recover from the setback.

“Since I’d been injured for so long, I’d tried all the different ways to deal with it, so I’ve kind of figured out what works and what doesn’t work... and just like, keeping going doesn’t work. You have to take a step back and figure out what you can do. And set goals but set goals of things that you can do.” (Alixe)

Each athlete had advice for dealing with injury – approaches that they perceived as effective. One athlete cited staying optimistic as a key to her perseverance through the struggles of her injury. She tried to stay optimistic with the initial unknowns prior to diagnosis, through a slow and uncertain rehabilitation back to sport, and, eventually, a successful return to competition. Other effective ways to cope with injury included having a strong social support network of family, friends, training partners, physiotherapists, coaches, trainers, mental skills consultants, massage therapists, and other athletes who had experienced injury and successfully returned to sport. Listening to professional advice and following a step-by-step recovery plan that could be amended based on progress and still involved training was seen as both effective and important. Being proactive, rather than reactive, in terms of health and stress and gaining relevant knowledge was paramount. Effective communication and patience were viewed as requirements during each small step in the recovery process. Focus needed to remain on areas that were possible to work on and the ups and downs in the recovery process needed to be accepted. Conversely, the athletes acknowledged that there were less effective ways to deal with injury, including ignoring the injury, suppressing any contradictory thoughts about choices involving sport participation, internalizing signals from unsupportive sources, rumination, and manipulating others to allow oneself to keep participating in sport while injured.
“When I had my injury and [other athletes] are able to tell you about their experience, it helps to kind of be like, okay, well they did it, so I can do it too.” (Cindy)

“We really broke it down into steps.” (Alixe, on her rehabilitation plan feeling more directed and manageable if sectioned into components)

“I think it was really important to do the stuff that I could do, like continue to be active. And feeling like I was training still… even if I really wasn’t.” (Jessica)

The idea of balance – working hard to get back, but not ignoring the limits of the body due to injury, was cited as one of the more difficult tasks to achieve. Despite other people in the athletes’ lives putting recommendations and limits on what they could do, and what would be best for them to do, the whole notion of backing off was seen as a lesson that the athletes personally had to struggle with to learn. This required self-awareness – a skill that many athletes attested to developing through their rehabilitation process.

“It’s definitely taught me to really be aware of my body, because it would be so easy to do too much. And then a week from now, be like, ‘wow, I can’t [train] anymore’. So you really just have to learn your body and what you can do. I would say that is huge for me. I’ve been injured before and I was like ‘ya I can do it, you’ll be fine’. And then you just get worse! It doesn’t work that way! You get worse and then you get more injured. So, ya… I just definitely just learned to balance it… and work on what I could work on at the time.” (Alixe)

“I’ve learned, stepping back. That’s hard. I think it’s the hardest thing to learn.” (Jessica)

Injury challenged each of these athletes. The struggle, and lack of ability to always cope effectively, was evident.

2.3.2 Approaching and managing setback experiences.

Key themes emerged across experiences dealing with approach and management of setbacks: (a) constructive thoughts and behaviours, (b) critical in pursuit of high achievement, (c) the importance of social support, and (d) striving for balance.
(a) Constructive thoughts and behaviours

“You wake up in the morning and decide how your day is going to be.” (Erin)

Taking a positive approach to all aspects of life and focusing on the good, while learning from – but not ruminating on – the bad, was conducive to coping. As Sarah stated:

“I figured out that if I was going to keep playing, it was because I loved doing it and if I was going to love doing it, I had to stop fixating on the little stupid things that I would do along the way.”

Two athletes shared strategies for dealing with negative events and the accompanying negative emotions. One athlete called it the “five minute rule” and the other athlete the “two hour rule”. Although the length of time differed, the premise behind each rule remained the same. As Erin explained, “you can give yourself two hours to be pissed off and angry and sad and then, just, life goes on”. The athletes gave themselves a time frame to feel negative, but once that time lapsed, they required themselves to move on. This was both for their benefit to allow for a productive focus that was not ruminative, and for the benefit of those around them, as Alixe pointed out.

“Attitudes are definitely contagious. It’s like, ya, it’s huge. Usually we aren’t allowed to say anything negative because it does definitely affect everyone else. I know it affects me, like if someone says, ‘Oh this is gonna be so hard!’ and then it’s like, ‘Oh I feel terrible today!’” (Alixe)

It was acknowledged that negativity affected not only the individual, but had an influence on those around them as well.

(b) Critical in pursuit of high achievement

“It’s about acknowledging. I could have done better; I should have done better, but I will do better next time.” (Jessica)

Each athlete spoke of the role of self-criticism in pushing her towards her sport goals, and this remained relevant during setbacks. Despite the positive attitudes adopted by these athletes, self-criticism was prevalent and viewed as part of the competitive nature and drive for
perfection. One athlete understood the notion of self-criticism in terms of all performance outcomes connecting to personal effort, explaining “what happens is based on what I have and haven’t done” (Jessica). Thus, if a setback occurred, the athletes tended to connect it to personal factors, and, as a result, were critical towards the self.

Athletes voiced that they were self-critical by nature and that self-criticism was seen as necessary to assess and solve any problems, allowing for improvement. However, in essence, they desired to learn from the problem using constructive criticism. This enabled the athletes to move on with a focus on the future and not on the past setback and help them to avoid rumination.

“I think people are very self-critical because you need to be in order to assess the problem or assess what’s not perfect and move on. But, you know, I feel like if you weren’t self-critical, or if you didn’t take your failures in stride or if you didn’t take it in properly, then you wouldn’t improve. Because it means you’re not analyzing the problem, you’re not trying to find a solution to it. …you’re not trying out to figure out what it is by looking at what you’ve done wrong. Or what you’re not doing, simply. So, I think, at the elite level, I think you can’t not really be self-critical, because how would you get there in the first place?” (Erin)

“I think people get better because they want to get better. They are like, ‘I can do better’. I think if you frame it positively, positive criticism is the way.” (Jessica)

“Look at it critically and criticize it and learn, but don’t carry it with you. Let go of it.” (Alixe)

Avoiding rumination was difficult, especially given that self-criticism was described as perpetuating at times and often resulted in self-doubt. The athletes were not only critical, but also desired perfection. The perpetuating cycle of the interplay between self-criticism and achievement striving was noted, as the latter leads to ever increasing standards, leading to more of the former. This negativity can have a destructive impact on performance, resulting in an
increased discrepancy between present status and desired standard, which many athletes labelled “perfection”.

“I think one of my main problems in sport is that I just assume perfection. That I just cannot handle, I cannot deal with non-perfection… I just assume perfection, so when it’s not going well it’s really hard ‘cause then I start mentally talking myself down and it’s just an endless circle.” (Cindy)

Given the difficulty in attaining “perfection”, or even standards that always become elevated above the present level, frequent episodes of self-criticism were not uncommon and often prevented athletes from moving on with an effective focus.

(c) The importance of social support

“It’s never quite as terrible to go through something if there’s someone else there.” (Sarah)

Teammates, training partners, family, friends, coaches, physiotherapists, doctors, and mental skills consultants were perceived as playing an integral role in coping with setbacks. A supportive environment helped the athletes work past their self-criticism during setback experiences. One athlete voiced the importance of social support in dealing with self-criticism.

“Every athlete is critical. It’s just the way they are. They have to have perfection. They have to have it all. And if there is a setback, it is really hard to bounce back unless you have a good friend support group or a good family support group.” (Cindy)

Support from someone who had experienced a similar issue was considered extremely beneficial by all of the athletes, and this was reflected extensively in dealing with injury. However, the development of self-reliance was also considered very helpful, especially since at times it was frustrating because it seemed like no one understood what the athlete was going through.

“Friends and family try to help, but there is only so much they can do. It helps to a point but when you get [back to sport] and you just want to be good and you know what it used to feel like and it doesn’t feel like it… there is nothing really that anyone can say that is going to make you feel better.
That, that’s how it is. That’s the setback and that is how life is, and you just have to learn to deal with it.” (Cindy)

Adequate social support was seen as important, but was not always available. Support from the self was an additional option, but given the challenges expressed by the athletes, this was also not meeting all needs, suggesting a lack in resources.

(d) Striving for balance

Striving for balance was a key strategy in dealing with setbacks and resonated with each of the athletes. Setbacks often resulted in fixation and rumination that at times became somewhat obsessive, which was described as an exhausting and dysfunctional focus.

“It [the setback] consumes my mind; it consumes my thoughts… that’s all I can think about.” (Cindy)

Athletes voiced difficulty in seeing the big picture and “letting go”, especially in light of major goals, although future ramifications were acknowledged. Many athletes recognized the importance of not sacrificing other aspects of life for sport, especially because focusing on outside pursuits was a common way to deal with injury and being cut from a team. However, the difficulty in maintaining this balance and objectivity was emphasized.

“It’s definitely very hard to, like, step back and look at [the setback event] objectively though. Especially in a big [competition] or if there is a rival or something.” (Erin)

Finding a true balance often required a step away from competitive sport. The separation from competitive sport differed for each athlete, but the focus on seeing the bigger picture was an issue for all of the athletes, even those who did not feel rumination on the setback was a problem for them.

“Basically, when I have my setbacks, there is nothing else in the world and I am consumed by the setback. Whether it be mental or physical, that is all I can think about, that is all that is on my mind. It’s like the greatest tragedy in the world. And there is nothing that can talk me out of it…. I can’t just take a step back when I’m in it. I just can’t wrap my mind around it. But as soon as I’m able to stand
out of it and it’s someone else’s problem, I am able to be the most level-headed person and actually give good advice.” (Cindy)

“I don’t think I obsess or ruminate. Not anymore really. Um, unless it’s like something good. But, definitely stepping back… I think I need to start doing that.” (Erin)

Athletes tried to direct focus and energy on what they could personally do and control, as a positive direction was seen to lay the foundation for future productivity. Expending energy on something out of the athlete’s control or on something in the past, with no “lesson” for the future, was seen as ineffective.

“I think if you are obsessing about something, then you are obviously not thinking about something that you should be doing to help yourself. And, I think a lot of people who don’t improve over a season, they might start to obsess.” (Erin)

“So it’s where you focus your attention and how you chose to feel, especially about something that you can no longer control, or that’s already happened, it’s huge. It’s exactly how your next practice is going to go.” (Erin)

Athletes were aware of the importance of balance and where it could be applied. At times though, there was a disconnect between this acknowledgement and successful application of skills to accomplish this objective.

2.4 Discussion

The purpose of this study was to understand young, high performance women athletes’ experiences with setbacks in sport. The athletes reported common setbacks in sport and were self-aware, identifying some effective and ineffective ways to cope with these experiences. Poor performance, performance plateau, and injury were cited as common setback experiences by the athletes. There was effective coping surrounding setbacks, with athletes citing constructive thoughts and behaviours, social support, and a focus on maintaining a balance. However, elements of self-criticism often limited the effectiveness of athletes’ coping strategies and
overshadowed their stress management techniques. The current study contributes to the literature by providing an in-depth understanding of high performance women athletes’ experiences with setbacks in a variety of sports, the challenges they face, how they coped, and what coping strategies and skills were developed and effective in the opinion of the athlete. This study also highlights areas in which athletes are experiencing difficulties in coping, such as events surrounding injury, poor performance, performance plateau, and self-criticism. Through identifying areas of challenge, we gain information about coping strategies or skills which could be better developed to improve athletes’ ability to deal with setbacks in sport.

2.4.1 Injury: Common and challenging.

Injury was the dominant setback and the accompanying challenges were evident, as expressed through each athlete’s story. Of particular concern to the athletes when considering a return to sport were worries about further injury, skill retention levels, physical fitness, and meeting coach/teammate expectations. These issues have been reflected in previous research (e.g., Podlog & Eklund, 2007). Injured athletes have been shown to experience decreased productivity and sense of achievement and physical competency, as well as lowered self-perceptions, loss of identity, and a change in social roles (Ford & Gordon, 1999; Thing, 2006).

The women athletes in the present study struggled with feelings of incompetency, further highlighting issues with how they viewed the self after an injury. Injury meant not playing, training, or competing, and this was extremely difficult for the women athletes. Additionally, negotiating frequency and intensity of training upon return to sport led to the athletes constantly questioning their approach and decisions. Thing (2006) has reported a similar situation among injured athletes, acknowledging that it was not easy for an injured athlete to adjust to the shift in everyday focus from training to rehabilitating, as well as negotiating the risk and uncertainty
with returning to sport. The stress of the unknowns and negotiating limits was echoed in the present study. The apparent stress surrounding this issue suggests that athletes are not always coping effectively. Understanding which, as well as where, coping approaches could be implemented will increase the tools and resources available to athletes and help with coping efforts.

The athletes in the present study outlined effective coping strategies in dealing with injury that have connections to previous literature. For example, coping using positive thoughts and focus is consistent with previous research (Brewer, 2007). Re-establishment of goals occurred among the athletes in the present study as a way to break their rehabilitation up into manageable steps and allowed for the recognition of small gains in progress. Other research has suggested that adjusting goals provides an opportunity to view oneself as a success during the return from injury (Podlog & Eklund, 2009). Social support was acknowledged by the athletes as beneficial in most setback situations and took the form of encouragement, reassurance, and advice, which is also in line with previous research (Ford & Gordon, 1999). However, while social support had its advantages, each of the women athletes in this study was frustrated when she perceived major avenues of support did not understand her situation. There are cases in the literature documenting athletes feeling misunderstood by those close to them (Thing, 2006) and feeling underserved in terms of social support (L. H. Johnson & Carroll, 1998; Udry, Gould, Bridges, & Tuffey, 1997). However, striving to promote effective avenues of social support has many benefits, including providing advice, guidance, and information, as well as tangible resources, and help with emotional adjustment (Gottleib, 1983; Pearson, 1986). Research supports the role of social support in coping with injury-related stressors in a sport context, and can also potentially enhance self-esteem, well-being, and emotional state, as well as reduce
feelings of isolation, restlessness, and depression (Manuel, Shilt, Smith, Durant, Lester, & Sinal, 2002; Mitchell, 2011). Thus, appropriate social support appears to be an important factor to promote in terms of effectively coping with setbacks in sport.

While the current study supports previous research, it also highlights the important issue that injury continues to pose challenges for athletes, suggesting additional resources might be beneficial. A variety of ineffective and effective ways to cope with injuries were highlighted, but the struggle in coping was evident among these athletes. While injury is expected to pose some negative issues or challenges to athletes, those involved in sport can better position resources (and athletes) to work through such experiences. Ironically, many athletes find themselves losing resources and support or negotiating new terrain unassisted during periods of injury. Better support needs to be in place to help athletes restructure their plans and goals in light of the injury, ensuring the athletes still have a focus and feel they are moving forward. Aid in negotiating limits and boundaries in terms of training to help with concerns regarding skill and fitness retention, as well as prevention of reinjury, would also be beneficial. Thing (2006) also identified a need to help injured athletes make challenging, but appropriate, decisions regarding their health and sport participation. Providing athletes with consistent resources tailored specifically for use during periods of injury that provide support and guidance could significantly aid in coping efforts.

2.4.2 Performance plateau: Need for awareness, understanding, and support.

One setback that has received relatively little consideration in sport psychology but was a major issue identified by the women athletes was the experience of performance plateau. Performance plateau has not been well-defined in the literature, particularly in the sport performance domain. From a rehabilitative standpoint, plateau is described as ambiguous
(Demain, Wiles, Roberts, & McPherson, 2006), and is a phase where improvement is no longer seen (Wiles, Ashburn, Payne, & Murphy, 2004). In terms of sport performance, much of the focus to date has been on plateaus during injury or due to overtraining (see M. B. Johnson & Thiese, 1992, for a review). To our knowledge, no published study has looked at the psychological experience of performance plateau among athletes. However, performance plateau seems to be a common occurrence, as the athletes spoke of the issue in familiar terms, either from the perspective of personal experience or witnessing it in another athlete. The distressing nature and the struggle in overcoming the stress and challenge a plateau presented was evident. Past research suggests that poor performance, or performance “slumps”, can be stressful and connected to negative affect that is often exacerbated as the cause is frequently unknown (Grove, 2004; Madden, Summers, & Brown, 1990; Taylor, 1988). The present study suggests a similar pattern with performance plateau.

Frustration, confusion, and questioning the reasons for the plateau were common. It was also frustrating to invest so much, but get little return and also feel as though there was a loss of control over an issue that was very important to them. The feelings of frustration often morphed into feeling overwhelmed, disappointed, guilty, angry, and anxious, and led to doubt, a lack of confidence and belief in ability, and, at times, challenged the athletes’ motivation to pursue sport. These experiences were similar to those expressed by young high-performance women athletes in an unpublished study by Vangool, Kowalski, and Fleming (2007). The athletes in the present study acknowledged that their high standards and need for continual improvement and progression towards goals, which is in opposition to the performance plateau, could cultivate extreme self-criticism at times.
Clearly, performance plateau is an area that needs to be better understood, and coping resources need to be directed towards this phenomenon. Resources for coaches, support staff, athletes, and parents that explain possible causes, solutions, and ways to cope could help during periods of performance plateau. Highlighting the issue could provide awareness as well as support and direction for athletes experiencing plateau. The participants in the present study outlined possible approaches to dealing with plateau. Identifying the small improvements in practice or competition was cited by the athletes as effective and is a strategy athletes, coaches, parents, training partners, and support staff could incorporate into discussions and analysis. Previous research has found pointing out small improvements results in the performance plateau seeming less threatening, promoting less negative connotations and emotional impact (Vangool et al., 2007). The athletes in the present study also suggested that keeping sport’s role in a balance with other aspects of life, seeking social support, and keeping a positive attitude seem to be promising approaches to coping with performance plateau. Research is needed to determine the strongest approaches, as well as best methods for delivery.

2.4.3 Expanding resources: The potential of self-compassion and mindfulness.

Through learning about the athletes’ experiences, it seems additional resources for dealing with setbacks are worthy of exploration. In particular, interventions and skill training that could target self-criticism and promotion of balance seem especially worthwhile. The current study suggests that athletes often struggle with self-criticism and maintenance of a balanced perspective during challenging times. Self-compassion, as well as mindfulness approaches, may help to address this gap. Self-compassion is comprised of three components: self-kindness, common humanity, and mindfulness (Neff, 2003b). Self-kindness involves being kind and understanding, rather than overly critical, towards oneself. Common humanity refers to
perceiving that one is not alone in his/her experiences. Finally, mindfulness involves keeping thoughts and feelings in balance, rather than over-identifying with them. Research has suggested that self-compassion has the potential for neutralizing negative emotions, promoting positive states of mind and buffering the effects of negative self-evaluation (see Neff, 2009, for a review). It is also associated with greater use of acceptance and positive reinterpretation coping strategies, as well as increased mastery goals (A. B. Allen & Leary, 2010; Neff et al., 2005). Past research has also demonstrated that self-compassion may be an important factor in influencing and regulating cognitions and emotions in the sport context (e.g., Mosewich et al., 2009, 2011).

Although not currently a widespread resource, self-compassion has the potential to help attain many of the goals and mind-frames desired by the athletes in the present study. The ruminative cycle of self-criticism that plagued many of the athletes might be buffered by self-compassion. Self-compassion, particularly the self-kindness and mindfulness elements, provides an individual with the ability to acknowledge problems and weaknesses and evaluate the self without self-condemnation, allowing for more accurate perceptions of the situation and a better ability to change maladaptive thoughts, feelings, or behaviours (Neff, 2003). The athlete is better able to move on with an effective focus and avoid excessive self-criticism and rumination (e.g., Neff, 2003b, 2009; Neff et al., 2005). Thus, self-compassion may help to foster constructive self-criticism and evaluation, strategies voiced as effective by the athletes in the present study. Common humanity could help athletes to identify with others who share similar experiences or more easily accept support from others (A. B. Allen & Leary, 2010), which was cited as a key strategy for coping with setbacks. In addition, common humanity may be especially useful in dealing with the feelings of isolation that come with injury and sources of social support not understanding the athlete’s experience. Feelings of isolation can be reduced
and adaptive coping can be promoted when people realize that they are not alone in their experience (Neff, 2003b). Additionally, the athletes’ goal of balance might be enhanced by mindfulness. The athletes were striving for a balance to deal with a variety of issues, including injury and performance difficulties. Ruminative thoughts, high expectations, and difficulties realigning goals commonly occur along with setbacks. The balance promoted by self-kindness, common humanity, and mindfulness may help with reducing rumination and obsession, which the athletes identified as detrimental to focus.

2.4.4 Moving forward: Conclusion.

The qualitative approach to the present study provided an opportunity to understand athletes’ experiences of setbacks through their own descriptions and explanations. The retrospective account allowed them to integrate their complete experience, cultivating a deeper understanding of their own personal experiences. However, a drawback of the retrospective nature of this study is that memories may not be accurate upon reflection. While this study provided an opportunity to explore issues surrounding setbacks in detail, one limitation is that generalizability is limited as each athlete’s experiences are unique. Nonetheless, this study provided the athletes with an opportunity to talk about the issues that were most relevant to them, which, subsequently, highlighted elements that deserve further research attention, such as coping with performance plateau and feelings of isolation and self-criticism. Future research should seek to address these issues by understanding the best coping strategies to deal with specific challenges and ensuring athletes can successfully apply them. Additionally, it may be worthwhile to explore the effectiveness of extending new types of coping resources, such as self-compassion and/or mindfulness intervention strategies (e.g., Gardner & Moore, 2004; Gilbert & Irons, 2004; Gilbert & Procter, 2006; Kabat-Zinn et al., 1992; Kelly et al., 2010; Leary et al.,
2007; Segal et al., 2002) to the sport domain, as well as continue to refine the coping skills training programs that have been established as we seek to foster more effective coping among athletes.

In conclusion, the athletes’ reflections suggest there may be gaps in support and resources when dealing with setbacks in high-performance sport. Hearing the athletes’ stories and their clear expression of struggle speaks to the importance of not only continued support, but the facilitation of new creative, supplementary resources to aid in coping with setbacks in sport.
2.5 Bridging Summary

Study 1 established evidence for the relevance of self-compassion in helping women athletes manage setback experiences in sport, particularly issues with which athletes attested to having difficulty in coping, including self-criticism and rumination. There seemed to be evidence in Study 1 that dealing with perfectionistic concerns was an additional challenge for the high performance athletes. These concerns might also be attenuated by self-compassion, given that self-compassion is conceptualized as useful in buffering the effects of negative self-evaluation (see Neff, 2009, for a review). Though self-compassion should be theoretically related to many variables in the stress process during management of setbacks, such relations have not been empirically examined in sport. Building from this foundation, Study 2 was designed to further examine the systematic relations between self-compassion and components of sport perfectionism, as well as explore the association of self-compassion within the stress and coping process to advance understanding of self-compassion within the stress and coping domain in sport. Study 2 examined self-compassion as a prospective predictor of appraisal processes, coping, and affect in a specific competition among women university athletes. To gain further insight on the function of self-compassion, moderating effects of self-compassion on the relation between achievement goal progress and aspects of the stress and coping process were also explored. The observed relations between self-compassion and dimensions of perfectionism and aspects of the stress and coping process were hoped to increase understanding of self-compassion’s theoretical and empirical connection to evaluative processes and the stress and coping process in women athletes.
Chapter 3: Examining Moderation and Direct Effects of Self-Compassion in the Stress and Coping Process in Women Athletes

3.1 Introduction

The construct of self-compassion has been receiving increased attention in sport and exercise psychology (Berry et al., 2010; Magnus et al., 2010; Mosewich, Crocker, & Kowalski, 2013; Mosewich et al., 2011). Self-compassion consists of three elements: self-kindness, common humanity, and mindfulness (Neff, 2003b). Self-kindness involves being understanding and accepting, rather than harshly self-critical, towards oneself during adverse situations. Common humanity is the acknowledgement that one’s experiences are not isolating, as others also have these experiences. Mindfulness involves keeping thoughts and feelings in balance, rather than overidentifying with them.

Empirical evidence suggests that self-compassion is adaptive, as the construct is positively related to indicators of adjustment such as happiness, optimism, conscientiousness, authentic pride, and positive affect (Mosewich et al., 2011; Neff, Rude et al., 2007). Additionally, self-compassion displays negative relations with less adaptive constructs, including neuroticism, negative affect, anxiety, rumination, social physique anxiety, fear of failure, fear or negative evaluation and depression (Mosewich et al., 2011; Neff, Kirkpatrick et al., 2007; Neff,

---

4 Chapter 3 is a version of a manuscript being prepared for submission for publication.
Rude et al., 2007). Conceptually, self-compassion is assumed to be most relevant when dealing with negative events (Neff, 2003b). As such, the setbacks, failures, challenges, and evaluation that are ubiquitous to sport provide the context for self-compassion to confer significant advantages to competitive athletes. Thus, the present study explored the links between self-compassion and coping and evaluative processes in sport to not only advance theoretical knowledge of self-compassion in sport, but also provide an increased understanding of the potential utility of self-compassion as a resource during difficult times.

### 3.1.1 Self-compassion in the stress and coping process.

Self-compassion may be an important resource to aid in managing the stress encountered in sport. Athletes face a variety of stressful demands such as performance difficulties, injuries, illness, personal and significant others’ expectations, interpersonal conflict, and organizational level conflict (Hanton, Fletcher, & Coughlan, 2005; Hoar et al., 2006; Mellalieu, Neil, Hanton, & Fletcher, 2009; Mosewich, Crocker, & Kowalski, 2013). The inability to effectively manage these demands could minimize the likelihood that athletes attain their athletic achievement goals. Effective stress management requires cognitive and behavioural coping skills to regulate emotions and govern cognitions and actions (Hanton, Thomas, & Mellalieu, 2009). The stress process also involves cognitive appraisal (Aldwin, 2007; Lazarus, 1991a). Appraisals of threat are associated with negative affect, avoidance, decreased coping expectancies, and lack of achievement (Adie, Duda, & Ntoumanis, 2008; Blascovich & Mendes, 2000; Blascovich, Seery, Mugridge, Norris, & Weisbuch, 2004; Jones, Meijen, McCarthy, & Sheffield, 2009; N. Skinner & Brewer, 2002). Appraisals of challenge and control are typically associated with positive affect, achievement, and increased coping expectancies (Adie et al., 2008; Blascovich & Mendes, 2000; Blascovich et al., 2004; Jones et al., 2009; N. Skinner & Brewer, 2002).
Conceptually, self-compassion could have an influence at various points in the stress process, including the appraisal of situations, the choice and options in coping efforts, or the use of self-compassion as a coping resource or strategy (A. B. Allen & Leary, 2010).

A. B. Allen and Leary (2010) highlight past research suggesting that self-compassion may play an important role in the coping process. Self-compassion is purported to promote accurate and adaptive perceptions or appraisals of situations (Neff, 2003b). Self-compassion seems to share the strongest conceptual link with cognitive restructuring, as individuals high in self-compassion view negative events in a less catastrophic way compared to those low in self-compassion (A. B. Allen & Leary, 2010; Neff et al., 2005).

Self-compassion also been associated with coping. Self-compassion is positively associated with optimism, curiosity, exploration, and personal initiative (Neff, Rude et al., 2007), which all are predictors of problem-focused coping (A. B. Allen & Leary, 2010). However, while self-compassion is related to variables that suggest taking action against problems (A. B. Allen & Leary, 2010), self-compassion does not significantly correlate with problem-focused coping strategies such as active coping, planning, suppression of competing activities, restraint coping, and seeking instrumental support (Neff et al., 2005). Given these contradictory findings, A. B. Allen and Leary suggest that self-compassionate people may only engage in problem-focused coping if they perceive that the issue can be solved by taking action. From a social support standpoint, the common humanity element of self-compassion may lead to people deriving indirect social support by perceiving that they are not alone in their experiences (A. B. Allen & Leary, 2010), reducing feelings of isolation and promoting adaptive coping (Neff, 2003a). However, self-compassion has not been shown to be related to seeking instrumental support or emotional support from others (Neff et al., 2005; Leary et al., 2007).
While the connection between self-compassion and problem-focused coping and social support is equivocal, the negative relation between self-compassion and avoidance coping appears less ambiguous. Compared to those low in self-compassion, people high in self-compassion are no more likely to take their minds off a negative event and they accept more responsibility for their actions (Leary et al., 2007), suggesting that distraction and avoidance coping is not used. Self-compassion has also been shown to be negatively related to avoidance coping in students after receiving a poor midterm grade (Neff et al., 2005). Overall, self-compassionate thinking appears to be a resource to manage negative events.

Although a growing amount of research has studied self-compassion, limited empirical effort has yet to be allocated to this characteristic of the self among samples of competitive athletes. However, as self-compassion is most relevant when dealing with negative events such as setbacks, failures, challenges, and evaluation (Neff, 2003b), the evaluation and challenges that occur in sport provide a foundation for exploration of key associations. The sport context can be highly evaluative, and women athletes have attested to the difficulties in dealing with evaluation on appearance as well as performance (Greenleaf, 2002; Krane et al., 2001; Mosewich et al., 2009). Research with adolescent women athletes suggests self-compassion is negatively related to less adaptive self-conscious emotions, namely shame proneness and guilt-free shame proneness, as well as social physique anxiety, objectified body consciousness, fear of failure, and fear of negative evaluation (Mosewich et al., 2011). Thus, self-compassion could be particularly useful for women athletes managing self-conscious emotions and self-evaluative thoughts and behaviours related to appearance and performance (Mosewich et al., 2011).

High performance women athletes have also attested to difficulties in coping with self-criticism, rumination, feelings of isolation, and pressure surrounding expectations - issues that
Mosewich, Crocker, and Kowalski (2013) suggest may be improved with increased self-compassion. The detrimental effects of negative self-evaluation are thought to be deterred by self-compassion (Neff, 2009) because self-compassion is not contingent on outcomes (such as performance evaluations; Neff, Kirkpatrick et al., 2007; Neff & Vonk, 2009) and is also not based on comparisons of the self to others (Neff, 2004). Self-compassion can provide a way for individuals to accurately perceive and deal with situations without engaging in excessive negative self-judgment and criticism (Leary et al., 2007; Neff, 2004; Neff & Vonk, 2009).

### 3.1.2 Self-compassion and perfectionism.

Self-compassion is also likely related to aspects of perfectionism in sport. Women athletes striving for perfection or very high goals in their sport have reported excessive, less than constructive self-criticism (Anshel, 2003; Mosewich, Crocker, & Kowalski, 2013). Evaluative and excessive concerns and criticism tend to accompany perfectionism (Flett & Hewitt, 2002). Although there is ongoing debate about the adaptive and maladaptive effects of perfectionism (e.g., Hall, 2005; Flett & Hewitt, 2005; Stoeber & Otto, 2006), most theorists agree that perfectionism is a multidimensional construct involving personal and social aspects related to the person’s desire to achieve high level standards of achievement and concerns about failing to reach those standards (e.g., Flett & Hewitt, 2005; Frost, Marten, Lahart, & Rosenblate, 1990; Stoeber & Becker, 2008).

While not all aspects of perfectionism are viewed as detrimental, empirical evidence suggests self-compassion is negatively related to neurotic aspects of perfectionism that cause distress due to discrepancies between performance and standards (Neff, 2003a). In the sport context, some researchers have investigated sport-domain specific aspects of perfectionism, including personal standards, organization, concern over mistakes, doubts about actions,
perceived parental pressure, and perceived coach pressure (Dunn, Causgrove Dunn, & Syrotuik, 2002; Gotwals & Dunn, 2009). Given that self-compassion is most relevant during times of difficulty or failure (Neff, 2003b), is not contingent on outcomes (Neff & Vonk, 2009), and is negatively related to rumination (Neff, Kirkpatrick et al., 2007), concern over mistakes and doubts about actions are two aspects of perfectionism likely to be negatively associated with self-compassion. Given self-compassionate individuals may set high standards for themselves, but they are just not devastated if they do not reach their goals (Neff, 2011a), it is expected that personal standards elements of perfectionism should not be related to self-compassion. The considerable variability among coaches and parents makes significant relations between self-compassion and perceived parental pressure and perceived coach pressure less likely. Overall, self-compassion and perfectionism should share conceptual links that will further inform the role of self-compassion in the sport domain.

The first purpose of this study was to explore self-compassion as a prospective predictor of aspects of the stress process, specifically appraisal processes, coping, and affect in a specific competition. Self-compassion was expected to be positively related to control and challenge appraisals, as well as positive affect. Negative relations were expected between self-compassion and threat appraisals, avoidance coping, and negative affect. No significant relations were expected between self-compassion and problem- and emotion-focused coping.

Also, given that self-compassion is especially relevant during times of difficulty or failure, self-compassion was expected to have the greatest impact on appraisal, coping, and affect processes when achievement goals are not met. Self-compassion is thought to be a buffer against negative affect when goals are not attained (Neff, 2011a). Therefore, in addition to examining the independent direct contribution of self-compassion in the stress and coping process, the
moderating effects of self-compassion on the relation between goal progress and aspects of the stress and coping process was also explored. It was hypothesized that low levels of self-compassion and low levels of goal progress would be significantly associated with higher levels of threat appraisal, avoidance coping, and negative affect and decreased levels of control appraisal, challenge appraisal, and positive affect compared to other conditions.

The second purpose of the present study was to explore the relation between self-compassion and the components of perfectionism. Conceptually, as self-compassion is most useful during times of difficulty, failure, and evaluation (Neff, 2003b) and seems to decrease issues connected to outcomes, comparisons, and evaluative processes (Neff, 2004; Neff, Kirkpatrick et al., 2007; Neff & Vonk, 2009; Mosewich et al., 2011), it was expected that self-compassion should attenuate evaluative concerns that are encompassed within characteristics of perfectionism. Thus, it was hypothesized that self-compassion should be negatively related to concern over mistakes and doubts about actions. Though negative relations between perceived parental pressure and perceived coach pressure make sense conceptually, due to the situational and contextual issues with athletes’ coaches and parents, no significant relations were expected. Personal standards and organization were not expected to show significant relations with self-compassion.

3.2 Method

3.2.1 Participants.

Participants included 122 women athletes involved in varsity sport in Canada ($M_{age} = 19.68$, $SD_{age} = 1.50$, range = 17 – 24 years). Ninety-five of the athletes completed measures at both time-points ($M_{age} = 19.77$, $SD_{age} = 1.53$, range = 17 – 24 years). Athletes ranged from first to fifth year of eligibility (Time 1 only: $M_{year} = 2.29$, $SD_{year} = 1.25$; both time-points: $M_{year} = $
2.31, $SD_{year} = 1.29$). All athletes were involved in varsity sport at the time of the study, and were in the competitive season for their respective sport, which included basketball (10.5%), cross country (12.9%), field hockey (12.1%), golf (6.5%), ice hockey (3.2%), rugby (10.5%), soccer (16.1%), softball (12.1%), swimming (9.7%), and track and field (5.5%; at Time 2: 12.6%, 11.6%, 5.3%, 13.7%, 10.5%, 12.6%, 12.6%, 6.3%, 4.2%, and 10.5%, respectively). Sixteen athletes at Time 1 and 12 athletes at Time 2 had made a national team. The sample was 92.6% Caucasian, 5.3% Japanese, 4.2% Aboriginal, 3.2% Chinese, 2.1% South Asian, 1.1% Filipino, 1.1% Black, 1.1% Korean, and 1.1% South-East Asian (91.9%, 4.0%, 3.2%, 3.2%, 2.4%, 1.6%, 1.6%, 0.9%, and 2.4% at Time 2, respectively).\(^5\)

3.2.2 Measures.

3.2.2.1 Demographics. General demographic information (age and sociocultural information), as well as sport specific information (type of sport, level of sport participation, and year of eligibility in the varsity system) was collected (see Appendix C). Participants were asked to provide an email address, which was used to contact participants for the second assessment, as well as match responses from the two time-points.

3.2.2.2 Self-compassion (Time 1). Self-compassion was measured using the Self-Compassion Scale (SCS; Neff, 2003a; see Appendix D). The 26-item SCS assesses six different aspects of self-compassion: self-kindness (5 items; e.g., “I try to be understanding and patient toward aspects of my personality I don’t like.”), self-judgment (5 items; e.g., “I’m disapproving and judgmental about my own flaws and inadequacies.”), common humanity (4 items; e.g., “I try to see my failings as part of the human condition.”), isolation (4 items; e.g., “When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the

\(^5\) Note that as participants could make more than one identification, percentages add to greater than 100%.
world."), mindfulness (4 items; e.g., “When something painful happens I try to take a balanced view of the situation.”), and over-identification (4 items; e.g., “When I’m feeling down I tend to obsess and fixate on everything that’s wrong.”). Response sets range from 1 (almost never) to 5 (almost always; Neff, 2003a). Total self-compassion scores were calculated by reverse scoring the negative subscale items (self-judgment, isolation, and over-identification) and then computing a total mean. Scores from the SCS have psychometric support (Leary et al., 2007; Mosewich et al., 2011; Neff, 2003a; Neff et al., 2005; Neff, Kirkpatrick et al., 2007).

3.2.2.3 Perfectionism (Time 1). The Sport Multidimensional Perfectionism Scale 2 (SMPS-2; Gotwals & Dunn, 2009; see Appendix E) is a sport specific perfectionism scale based on Frost and colleagues’ (1990) multidimensional conceptualization of perfectionism. The 42-item measure consists of six subscales rated on a 5-point scale: personal standards (7 items; e.g., “I have extremely high goals for myself in my sport.”), concern over mistakes (8 items; e.g., “I should be upset if I make a mistake in a competition.”), perceived parental pressure (9 items; e.g., “In competition, I never feel like I can quite meet my parents’ expectations.”), perceived coach pressure (6 items; e.g., “Only outstanding performance in competition is good enough for my coach.”), doubts about actions (6 items; e.g., “I usually feel unsure about the adequacy of my pre-competition practices.”), and organization (6 items; e.g., “On the day of competition I have a routine that I try to follow.”). Mean subscale scores were calculated. Validity evidence has been established (Gotwals & Dunn, 2009; Gotwals, Dunn, Causgrove Dunn, & Gamache, 2010).

3.2.2.4 Coping (Time 2). The Coping Function Questionnaire (CFQ) is a sport-specific instrument (Kowalski & Crocker, 2001) and was modified slightly to assess competition-specific coping functions (see Appendix F). The CFQ has 18 items on a 5-point scale and assesses three functions of coping: problem-focused (6 items; e.g., “I tried to find a way to change the
competition."), emotion-focused (7 items; e.g., “I tried to view the competition in a way that made it seem less stressful.”), and avoidance (5 items; e.g., “I tried to get out of the competition as soon as I could to reduce the stress.”). Item responses are on a 5-point scale and mean scores for each coping function were calculated. The CFQ was initially validated with adolescent athletes (Kowalski & Crocker, 2001), but has been used with adult athletes, including athletes falling into high performance and varsity categories (e.g., M. S. Allen, Greenlees, & Jones, 2011; Hanton, Neil, Mellalieu, & Fletcher, 2008).

3.2.2.5 Athlete perceived goal progress (Time 2). Goal progress was assessed using a measure developed by Dugas, Gaudreau, and Carraro (2012; see Appendix G). The instrument was modified to focus on goal progress during a recent competition and employed 5 items on a 9-point scale. Scores on individual items (e.g., “You advanced towards your athletic goals.”) collectively provide a mean score for goal progress. Past research has provided satisfactory internal consistency and strong factorial validity support for the measure (Dugas et al., 2012).

3.2.2.6 Cognitive appraisal (Time 2). Cognitive appraisals of competition demands were assessed using scales based on the Stress Appraisal Measure (Peacock & Wong, 1990; see Appendix H). Scales were modified to reflect athlete competition settings (threat: 3 items, “I perceived this stressful competition as threatening.”, challenge: 3 items, “I believed I could become stronger after experiencing this stressful competition.”, and perceived control: 3 items, “I believed I had the skills necessary to overcome this stressful competition.”). Participants respond on a 5-point scale and mean scores for each type of appraisal were determined.

3.2.2.7 Positive and negative affect (Time 2). The Positive and Negative Affect Schedule (PANAS) measured positive and negative affect (Watson, Clark, & Tellegen, 1988; see Appendix I). The PANAS contains 10 items measuring positive affect (e.g., excited, alert,
enthusiastic) and 10 items reflecting negative affect (e.g., nervous, hostile, upset), with participants responding to each on a 5-point scale. Mean scores for positive and negative affect were calculated. State affect surrounding a recent sport competition was assessed in the present study. Support has been found for the reliability and construct validity among the general adult population (Crawford & Henry, 2004). Reliability support in a varsity athlete sample has also been established (Lemyre, Treasure, & Roberts, 2006), as well as reliability and validity support among youth athletes (Crocker, 1997).

3.2.3 Procedure.

After obtaining ethical approval from the university research board, athletes from varsity sports teams were recruited through team visits and emails and informed consent was obtained from all participants (see Appendix J for consent form). The present study employed a prospective design. At Time 1, athletes completed the SCS and the SMPS in a team setting. Approximately four weeks later, athletes completed the coping, appraisal, and affect measures. The Time 2 questionnaire was completed online at the athletes’ convenience within 24 hours of participating in a competition using a secure online survey tool. Athletes were paid $10 for completing the first questionnaire.

3.2.3.1 Data analysis. Before running statistical analyses, the data were screened for missing responses and outliers and examined to test the assumptions of normality, linearity, and homoscedasticity (Tabachnick & Fidell, 2007). Variables with skewness or kurtosis values of greater than 2.5 (negative affect, positive affect, avoidance coping) were transformed and all analyses were rerun. As none of the conclusions changed, the variables were left untransformed.

6 Athletes also completed a 1-item sport performance rating, as well as described their challenging sport situation in the second questionnaire. This data was not used in the analysis for the present study.
Participants with two or more missing data points from at least two of the measures were eliminated from the analysis. Other missing data was handled using median replacement.

The data from the 122 athletes who completed the Time 1 measures were used to assess hypotheses related to self-compassion and perfectionism. Simple linear relationships were examined through Pearson product moment correlations.

Model testing (direct and moderator models) utilized data from both time-points (N = 95). Hierarchical regression was used to explore the moderating effects of self-compassion on the relations between goal progress and aspects of the stress process (appraisal, coping, and affect). Variables were centered prior to analysis. Separate hierarchical regressions were run for control appraisal, challenge appraisal, threat appraisal, emotion-focused coping, problem-focused coping, avoidance coping, positive affect, and negative affect as dependent variables. Self-compassion and goal progress variables were entered in Step 1 and the interaction term in Step 2. As no significant interactions were found, there was no need for post hoc probing (Aiken & West, 1991).

3.3 Results

Means and standard deviations of all variables are provided in Table 3.1, along with Cronbach’s alpha values. Self-compassion scores showed significant negative relations with perfectionism dimensions of doubts about actions and concern over mistakes, supporting the hypothesis (see Table 3.2). A significant negative relation was also found between self-compassion and perceived coach pressure (see Table 3.2). Self-compassion was also positively related to control appraisal, and negatively related to threat appraisal, avoidance coping, and negative affect (see Table 3.3), which is also in line with hypotheses.
Regression analyses found no support for the moderation model; however, significant main effects were found (see Table 3.4). Self-compassion was a negative individual predictor of negative affect ($\beta = -0.358, p < .01$), threat appraisal ($\beta = -0.297, p < .01$), and avoidance coping ($\beta = -0.209, p < .05$), and a positive predictor of control appraisal ($\beta = 0.209, p < .05$). Goal progress was a positive predictor of positive affect ($\beta = 0.543, p < .01$), control appraisal ($\beta = 0.457, p < .01$), and challenge appraisal ($\beta = 0.362, p < .01$), and a negative predictor of negative affect ($\beta = -0.263, p < .01$) and avoidance coping ($\beta = -0.295, p < .01$).

3.4 Discussion

This study shows significant relations between self-compassion and dimensions of perfectionism and aspects of the stress and coping process, providing further support of self-compassion’s theoretical and empirical connection to evaluative processes and coping in athletes. There is evidence that self-compassion is related to the social evaluative aspects of sport perfectionism, which was hypothesized. Though it was expected that the relation between goal progress on the stress and coping process would be moderated by self-compassion, there was no evidence to support this contention. However, both goal progress and self-compassion appear to be important individual predictors of the stress and coping process. When considering direct effects models, goal progress was a significant predictor of aspects of appraisal, coping, and affective states, but self-compassion also made significant individual contributions to the prediction of threat appraisal, control appraisal, avoidance coping, and negative affect.

3.4.1 Self-compassion and perfectionism.

The negative relation between self-compassion and doubts about actions and concern over mistakes can be linked to the contention that self-compassion encompasses an absence of self-criticism and harsh self-judgment and self-evaluation (Neff, 2003b). Conceptually, self-
compassion allows an individual to evaluate the self without self-condemnation, promoting more accurate perceptions of the situation (Neff, 2003b). When an athlete faces failure or evaluation, self-compassion permits the acknowledgement and evaluation of weaknesses but without excessive self-criticism and judgment (e.g., Neff, 2003b; Neff, 2009; Neff et al., 2005). Thus, an athlete with high self-compassion would be positioned to evaluate both progressions and setbacks in an adaptive manner, and not be overly concerned with mistakes or consumed with self-doubt. A cyclical effect could be present as well, as less doubt and concern, as well as decreased harsh self-criticism and self-judgment, could facilitate the development of self-compassion.

3.4.2 Self-compassion and appraisal.

Self-compassion appears to be associated with adaptive appraisals in the sport competition context. Self-compassion was positively related to control appraisals and negatively related to threat appraisals, even when accounting for the effects of goal progress. This provides more support for the contention that self-compassion promotes adaptive frames of mind and accurate perceptions of situations (Neff, 2003b), including more accurate self-appraisals (i.e., without self-deprecation or self-enhancement; Leary et al., 2007), putting athletes into a state of mind where they can manage and negotiate stressful sport situations. The mindfulness component of self-compassion also promotes a balance in thoughts and feelings, as opposed to allowing oneself to overidentify (Neff, 2003b). Balance should promote greater perceptions of control and thwart those of threat.

The lack of significant relation between self-compassion and challenge appraisal was unexpected, as self-compassion is associated with mastery goals (Neff et al., 2005) and also involves wanting to do what is best for oneself and taking personal initiative (Neff, 2011a; Neff,
Rude et al., 2007). Research has largely focused on the benefits of self-compassion in sport, but the lack of relation with challenge suggests potential drawbacks should also be considered. Though Neff (2003b) contends that self-compassion does not lead to passivity, it is possible that self-compassion may not be directly related to personal growth or achievement striving. Specifically, one may not need to directly challenge oneself in order to provide proper self-care, which is the focus of self-compassion. It should also be considered that perceptions of challenge may be heavily determined by the sport context, and thus, be more context and situation specific. The correlations between appraisal variables and self-compassion are weak, and the lack of relation may merely reflect a lack of power to detect a weak effect. As future research establishes the connection between self-compassion and personal growth and fulfillment of potential, the conceptual links to challenge appraisals will become more clear.

3.4.3 Self-compassion and coping.

Though significant relations were not found between self-compassion and problem-focused coping or emotion-focused coping, the present study furthers understanding about the role of self-compassion in coping function during a competition situation. Previous research provides mixed support for the associations between these coping functions (A. B. Allen & Leary, 2010). However, it may be that self-compassion is more related to coping effectiveness than a particular coping function or strategy, as effectiveness may vary across different situations. A. B. Allen and Leary suggest that self-compassionate people may only engage in problem-focused coping if they perceive that the issue can be solved by taking action. The same logic can apply to emotion-focused coping, or any specific coping strategies. People high in self-compassion desire to give themselves care (Neff, 2011a) and will likely take steps that will accomplish such objectives, and this may include choosing the most relevant coping approach.
for the situation. Problem-focused coping and emotion-focused coping, and the different strategies classified within them, are useful in different circumstances (Nicholls et al., 2005). Athletes’ differing competitive circumstances may require different approaches, eliminating clear consistent relationships between self-compassion and problem- and emotion-focused coping. Future research should examine if self-compassion promotes effective coping choices and outcomes, as effective coping is more relevant to performance and well-being than the specific approach.

Self-compassion does, however, appear to have an important link with avoidance coping. The negative association between avoidance coping and self-compassion is in line with previous research in non-sport populations (Neff et al., 2005; Leary et al., 2007). For example, people high in self-compassion are no more likely to take their minds off a negative event than those low in self-compassion and they accept more responsibility for their actions than those low in self-compassion (Leary et al., 2007), suggesting an absence of distraction and avoidance coping. Self-compassion has also been shown to be negatively related to avoidance coping in students after receiving a poor midterm grade (Neff et al., 2005). These findings make sense conceptually, as the mindfulness component of self-compassion requires one to keep a balanced perspective – accepting and understanding, but not avoiding (Neff, 2003b), an approach likely to lack effectiveness in competition situations.

3.4.4 Self-compassion and affect.

Given the adaptive qualities associated with self-compassion, the negative relation with negative affect is not surprising and is in line with previous research (e.g., Adams & Leary, 2007; Neff, Rude et al., 2007). However, the lack of a significant relation with positive affect is contrary to previous research (Neff, Rude et al., 2007). It is important to note that the present
study focused on state affect connected to a sport competition, as opposed to trait affect. It could be that lacking self-compassion has more implications for negative affect, at least in a sport context. Though self-compassion has shown a positive relation with positive affect in past research, Neff and colleagues maintain that self-compassion stems more from the ability to manage negative emotions (Neff, Kirkpatrick et al., 2007; Neff, Rude et al., 2007). Measurement of positive affect also needs to be considered. Both the present study and research by Neff, Rude et al. (2007) used the PANAS to measure affect. The majority of the adjectives associated with positive affect imply a sense of active engagement (e.g., “interested”, “attentive”, “inspired”, “determined”). While these adjectives could be associated with personal initiative and the desire to care for oneself (Neff, 2011a; Neff, Rude et al., 2007), in a group of athletes at this level, most will be quite engaged in their task, regardless of their level of self-compassion and show high mean scores on the measure. Additionally, as athletes were reporting on their most recent competitive experience, it could be that athletes who are low in self-compassion may be more likely to self-report negative events and have strong affective reactions to them because they are highly judgemental. Those athletes who are higher in self-compassion may exhibit less extreme affect, be it positive or negative, related to the competition. Thus, the absence of extreme affect aligns well with the mindfulness component of self-compassion.

3.4.5 Self-compassion as a moderator of the stress and coping process.

The results of the present study do not provide support for the hypothesis that self-compassion would moderate the relations between goal progress and appraisal, coping, and affect. Though not supported in the present study, previous work has suggested that self-compassion may function as a moderator to buffer against negative reactions and emotions. Self-compassion has been shown to moderate negative emotions after receiving neutral (i.e., not
positive) feedback (Leary et al., 2007). Thus, self-compassion may function as a moderator in other areas, and also appears to serve as a buffer through directly attenuating negative responses (see Neff, 2009 for a review).

The lack of support for the moderation hypothesis, however, does not suggest that goal progress and self-compassion are not important factors in the stress and coping process. Both progress towards goals and self-compassion are important independent factors to consider when looking at athletes’ appraisal, coping, and affect. Past research has also supported the importance of goal attainment in stress, coping, and emotion (e.g., Gaudreau & Antl, 2008; Gaudreau & Blondin, 2004; Hoar et al., 2006; Weise, 2007). On the other hand, relatively little was known about the role of self-compassion in the stress and coping process. However, conceptually, self-compassion is often positioned as a buffer, particularly surrounding negative events, thoughts, and behaviours (e.g., Leary et al., 2007; Neff, Kirkpatrick et al., 2007; Magnus et al., 2010; Mosewich et al., 2011). Results of the present study suggest self-compassion helps to predict control appraisal, threat appraisal, avoidance coping, and negative affect, even after controlling for goal progress. This leads to the proposition that self-compassion may play a direct effect in attenuating negative aspects of the stress and coping process in sport, while facilitating the positive.

3.4.6 Strengths, limitations, and future directions.

While this study has a number of strengths, including its prospective design, sport-specific context, and consideration of multiple aspects of the stress and coping process, including appraisal, coping, and affect, it is not without limitations. First, while coping function was assessed using a sport-specific measure with demonstrated psychometric support, the scores provide no insight into the specific coping strategies employed by athletes during the reported
competition and requires athletes to make inferences about the function of their coping efforts. An additional issue arises with the appraisal measure, as it has not previously been employed. However, preliminary examination of factor loadings and Cronbach’s alpha values provide some validity and reliability support. Another limitation is the relatively moderate sample size. While adequate for the present analyses, a larger sample would allow more complex statistical modeling such as latent variable models. Additionally, there is a need for longitudinal, multiwave research to understand the influence of self-compassion over training and competition cycles. The present study focused on women athletes, which was relevant given their documented challenges with self-criticism and evaluative processes (Greenleaf, 2002; Krane et al., 2001; Mosewich et al., 2009, 2011). However, such a focus does not make it possible to examine if gender differences exist on key variables. Finally, due to the unique aspects of different sports, and different sport situations, the measurement of goal progress across multiple sports can be challenging. However, in an attempt to standardize across sports and different competitive situations, goal progress in the present study measured the degree to which athletes perceived they were making progress towards their goals. Goal progress showed theoretically meaningful relations (positive relations with positive affect, control appraisal, and challenge appraisal, and negative relations with negative affect), providing more confidence in the measure.

3.4.7 Conclusion.

Overall, this study suggests self-compassion has important links with the stress and coping process and with social evaluative aspects of perfectionism in women university athletes. This provides further support for the contention that self-compassion may be a useful resource in the sport domain (Mosewich et al., 2009, 2011; Mosewich, Crocker, & Kowalski, 2013).
Examining the feasibility and effectiveness of self-compassion promotion programs in sport to deal with issues surrounding setback and failure experiences and evaluative processes would be a useful step towards evaluating potential for application in sport.
Table 3.1

Means, Standard Deviations, and Cronbach’s Alpha Values for Study Variables.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time 1 (N = 122)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-compassion</td>
<td>2.50</td>
<td>0.49</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>(1.31-3.85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal standards</td>
<td>3.58</td>
<td>0.56</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>(1.86-5.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concern over mistakes</td>
<td>2.98</td>
<td>0.67</td>
<td>.80</td>
</tr>
<tr>
<td></td>
<td>(1.75-4.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived parental pressure</td>
<td>2.23</td>
<td>0.83</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>(1.00-4.56)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived coach pressure</td>
<td>3.34</td>
<td>0.70</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>(1.67-4.83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doubts about actions</td>
<td>2.59</td>
<td>0.72</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>(1.17-4.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>3.80</td>
<td>0.66</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td>(2.00-5.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time 2 (N = 95)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal progress</td>
<td>5.04</td>
<td>1.83</td>
<td>.96</td>
</tr>
<tr>
<td></td>
<td>(1.00-9.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control appraisal</td>
<td>3.58</td>
<td>0.74</td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td>(1.67-5.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge appraisal</td>
<td>3.86</td>
<td>0.76</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>(2.00-5.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat appraisal</td>
<td>2.65</td>
<td>0.83</td>
<td>.72</td>
</tr>
<tr>
<td></td>
<td>(1.00-5.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotion-focused coping</td>
<td>3.12</td>
<td>0.57</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>(1.17-4.83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td>2.98</td>
<td>0.81</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>(1.43-4.43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance coping</td>
<td>1.55</td>
<td>0.78</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>(1.00-4.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive affect</td>
<td>3.75</td>
<td>0.76</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>(1.30-5.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative affect</td>
<td>2.26</td>
<td>0.68</td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td>(1.10-4.40)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Range for all variables at Time 1 was 1 to 5; range for all variables at Time 2 was 1 to 5 (except goal progress which was 1 to 9).
Table 3.2

*Pearson Product Moment Correlations for Self-Compassion and Components of Perfectionism from the SMPS-2 (Time 1)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-compassion</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Personal standards</td>
<td>-.02</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Concern over mistakes</td>
<td>-.52**</td>
<td>.34**</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceived parental pressure</td>
<td>-.03</td>
<td>.25**</td>
<td>.23*</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Perceived coach pressure</td>
<td>-.19*</td>
<td>.30**</td>
<td>.23**</td>
<td>.31**</td>
<td>----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Doubts about action</td>
<td>-.33**</td>
<td>-.07</td>
<td>.37**</td>
<td>-.01</td>
<td>.20*</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>7. Organization</td>
<td>-.02</td>
<td>.29**</td>
<td>.22**</td>
<td>.04</td>
<td>.09</td>
<td>.01</td>
<td>----</td>
</tr>
</tbody>
</table>

*Note. *p < .05, **p < .01*
Table 3.3

*Pearson Product Moment Correlations for Self-Compassion (Time 1) and Goal Progress, Appraisal, Coping, and Affect (Time 2)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-compassion</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Goal progress</td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Control appraisal</td>
<td>.28**</td>
<td>.49**</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Challenge appraisal</td>
<td>.11</td>
<td>.37**</td>
<td>.55**</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Threat appraisal</td>
<td>-.28**</td>
<td>.07</td>
<td>-.01</td>
<td>.07</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Problem-focused coping</td>
<td>.10</td>
<td>.17</td>
<td>.28**</td>
<td>.27**</td>
<td>.27**</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Emotion-focused coping</td>
<td>-.08</td>
<td>.12</td>
<td>.19</td>
<td>.22*</td>
<td>.29**</td>
<td>.29**</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Avoidance coping</td>
<td>-.25*</td>
<td>-.33**</td>
<td>-.32**</td>
<td>-.17</td>
<td>.32**</td>
<td>.02</td>
<td>.15</td>
<td>----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Positive affect</td>
<td>.16</td>
<td>.56**</td>
<td>.48**</td>
<td>.55**</td>
<td>-.06</td>
<td>.13</td>
<td>.01</td>
<td>-.23*</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>10. Negative affect</td>
<td>-.40**</td>
<td>-.32**</td>
<td>-.21*</td>
<td>-.10</td>
<td>.54**</td>
<td>.10</td>
<td>.18</td>
<td>.47**</td>
<td>-.19</td>
<td>----</td>
</tr>
</tbody>
</table>

*Note.* *p < .05; **p < .01
### Table 3.4

**Summary Table of Hierarchical Regression Analyses** Showing Main Effects of Self-Compassion (SC) and Goal Progress (GP; Step 1) and Interaction Effects (Step 2)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Step 1 [self-compassion (SC) and goal progress (GP)]</th>
<th>Step 2 [interaction (SCxGP)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Positive affect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>.098</td>
<td>.113</td>
</tr>
<tr>
<td>GP</td>
<td>.224</td>
<td>.036</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative affect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>-.414</td>
<td>.107</td>
</tr>
<tr>
<td>GP</td>
<td>-.097</td>
<td>.034</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control appraisal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>.266</td>
<td>.114</td>
</tr>
<tr>
<td>GP</td>
<td>.186</td>
<td>.036</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge appraisal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>.079</td>
<td>.128</td>
</tr>
<tr>
<td>GP</td>
<td>.151</td>
<td>.041</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat appraisal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>-.420</td>
<td>.142</td>
</tr>
<tr>
<td>GP</td>
<td>.050</td>
<td>.050</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotion-focused coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>-.093</td>
<td>.101</td>
</tr>
<tr>
<td>GP</td>
<td>.042</td>
<td>.032</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>.102</td>
<td>.144</td>
</tr>
<tr>
<td>GP</td>
<td>.069</td>
<td>.046</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>-.278</td>
<td>.130</td>
</tr>
<tr>
<td>GP</td>
<td>-.126</td>
<td>.041</td>
</tr>
<tr>
<td>SCxGP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. *p < .05*
3.5 Bridging Summary

Given the potential applications and benefits of self-compassion highlighted in Study 1 and Study 2, as well as those supported by past research, developing an intervention to enhance self-compassion among women athletes was warranted. Study 1 suggested that self-compassion may help to attain many of the goals and mind-frames desired by athletes going through difficult times. While the athletes in Study 1 seemed self-aware in identifying more and less effective ways of coping, it seemed apparent that they required guidance in developing skills necessary to effectively cope with specific issues, particularly rumination and berating self-criticism. Self-compassion may also be especially useful when coping with failure, setbacks, feelings of inadequacy, evaluation, and other negative events, particularly in managing the self-criticism and rumination that often accompanies such occurrences. Study 2 suggested self-compassion exhibits key relations to variables associated with the stress process. Though the lack of a significant interaction effect between self-compassion and goal progress does not provide support for self-compassion as a buffer to the specific negative / difficult event of goal progress, self-compassion does attenuate negative responses that would accompany managing negative events. There was also evidence that concern over mistakes, a key aspect of perfectionism, was also related to self-compassion. Taken together, the constructs of self-criticism, rumination, and concern over mistakes seem a relevant focus along with self-compassion promotion in an intervention study.

A challenge in transferring research constructs to applied situations is understanding the best way to implement and teach the strategy. As the key to a successful coping intervention is the development of psychological skills (R. E. Smith, Schultz, Smoll, & Ptacek, 1995), focus needs to initially lie in how to successfully develop and implement self-compassionate
perspectives. Given the relative infancy of self-compassion, well-developed self-compassion interventions are sparse. Most research has focused on an examination of self-compassion in terms of basic relations and predictability among various psychological and well-being variables; however, as outlined in Chapter 1, there have been research attempts in self-compassion promotion, providing some foundation and direction for future endeavours.

To date, no controlled experimental study has examined the implementation of self-compassion among women athletes. Given the pressures and demands faced by many athletes in sport, the evaluation of a self-compassion intervention is a step towards facilitating positive sport experiences. Thus, Study 3 investigated the effects of a self-compassion intervention on negative cognitive states and self-compassion in varsity women athletes.
Chapter 4: Applying Self-Compassion in Sport: An Intervention with Women Athletes

4.1 Introduction

Stress can result in a myriad of negative emotions, cognitions, and behaviours in athletes including anxiety, shame and guilt, excessive self-criticism, prolonged negative ruminations, social withdrawal / avoidance, aggression, burnout, and sport performance problems (Goodger, Gorely, Lavallee, & Harwood, 2007; Lazarus, 2000; Nicholls, Polman, Levy, Taylor, & Coble, 2007; Polman, 2012). Effective stress and emotion regulation requires that athletes possess personal and social resources and effectively employ an array of cognitive and behavioural skills (Hoar et al., 2006; Lane, Beedie, Devonport, & Stanley, 2011; Nicholls, 2010).

Self-compassion may play an important role in emotion regulation, offering a strategy to deal with negative cognitions and emotions associated with failure and negative events, while at the same time presenting an opportunity to learn from the experience and promote a more positive state of mind (Leary et al., 2007; Neff et al., 2005; Shepard & Cardon, 2009; Terry & Leary, 2011). Self-compassion is also related to coping, mainly through cognitive restructuring (A. B. Allen & Leary, 2010). Self-compassion involves giving oneself care and compassion during difficult times (Neff, 2003b). It is conceptualized as consisting of three elements. The first element, *self-kindness*, involves being understanding and accepting towards oneself in times

---

7 Chapter 4 is a version of a manuscript that has been submitted for publication.
of adversity as opposed to being overly self-critical or highly judgemental (Neff, 2003b). The second, *common humanity*, is the acknowledgement that one’s experiences are not isolating; rather others have similar experiences (Neff, 2003b). Finally, *mindfulness* involves a balance among thoughts and feelings, as opposed to suppressing or denying them (Neff, 2003b). Being mindful is the opposite of engaging in overidentification, where one is overly reactive and involved with cognition and emotion (Neff, 2003b).

Research in psychology supports positive associations between self-compassion and a variety of adaptive outcomes, including life-satisfaction, social connectedness, emotional intelligence, mastery goals, happiness, optimism, positive affect, wisdom, personal initiative, curiosity and exploration, agreeableness, extroversion, and conscientiousness and negative relations to negative affect, self-criticism, depression, anxiety, sadness, rumination, thought suppression, neuroticism, perfectionism, performance goals, and disordered eating behaviours (Adams & Leary, 2007; Leary et al., 2007; Neff, 2003a; Neff et al., 2005; Neff, Rude et al., 2007). Research on self-compassion promotion suggests it is related to decreased self-criticism, depression, anxiety, shame, feelings of inferiority, submissive behaviour, and negative affect, as well as increased self-soothing, self-reassurance, personal responsibility, and happiness (Gilbert & Irons, 2004; Gilbert & Procter, 2006; Leary et al., 2007; Shapira & Mongrain, 2010).

Empirical evidence also supports the association between self-compassion and cognitions and emotions in the sport domain. Research with adolescent women athletes found that self-compassion was negatively related to shame proneness, guilt-free shame proneness, social physique anxiety, objectified body consciousness, fear of failure, and fear of negative evaluation (Mosewich et al., 2011). These findings imply that self-compassion could be particularly useful for athletes managing dysfunctional self-conscious emotions and self-evaluative thoughts and
behaviours related to appearance and performance (Mosewich et al., 2011). The promotion of self-compassion towards the body and muscularity may be useful in countering some of the evaluation experienced by women athletes, which is important as many women athletes feel evaluated on both their performance and their physique (Mosewich et al., 2009). Preliminary research in varsity women athletes found that self-compassion was negatively related to negative affect and several perfectionism components such as concern over mistakes, doubts about actions, and perceived coach pressure (Mosewich, Kowalski, Gaudreau, Sabiston, & Crocker, 2013). The sport-related research suggests that self-compassion may attenuate less than constructive aspects of perfectionism, as well as negative cognition and affect.

In addition to links with cognition and emotion, self-compassion may also be related to the coping process in sport. Self-compassion has shown positive associations with control appraisal, and negative associations to threat appraisal and avoidance coping in varsity women athletes (Mosewich, Kowalski et al., 2013). Athletes with higher levels of self-compassion reported higher control and challenge appraisals, while athletes with lower levels of self-compassion scored higher on threat appraisals and avoidance coping. The research in the sport domain and the general psychological literature indicates that self-compassion has theoretically and empirically meaningful relations to the stress and coping process. Self-compassion may protect against negative thoughts, emotions, and behaviours, positioning it strongly for consideration in terms of potential application in sport.

While correlational research provides support for the positive aspects of self-compassion, no intervention or experimental studies have examined its causal influence in an applied sport context. Despite the scarcity of self-compassion intervention research in sport, there are some studies outside of the sport context that have examined the effectiveness of self-compassion
interventions. There are variations in the interventions, with compassionate imagery (Gilbert & Irons, 2004), compassionate writing (Leary et al., 2007; Shapira & Mongrain, 2010), and psychoeducation (Adams & Leary, 2007) being employed to target self-criticism, managing negative events, depression, and restrictive eating/eating guilt (respectively). Other interventions have used a multimodal design. For example, Gilbert and Procter (2006) targeted shame and self-criticism using compassionate imagery and writing, along with therapeutic guidance. Kelly and colleagues (2010) attempted to promote smoking cessation with compassionate imagery, writing, and psychoeducation. Neff and Germer’s (2013) Mindful Self-Compassion program employed educational and discussion-based group sessions, applied skills, and meditation to target self-compassion and well-being indicators. Overall, there have been a variety of promising approaches, many of which have strong potential for application in the sport domain.

Women athletes in particular are a viable target for self-compassion intervention attempts. As a whole, women tend to exhibit lower self-compassion (Neff, 2003a; Neff et al., 2005; Neff & McGehee, 2010) and greater rumination (Nolen-Hoeksema, Larson, & Grayson, 1999) compared to men. Additionally, rumination and self-criticism have been identified by women athletes as posing particular problems in coping (Mosewich, Crocker, & Kowalski, 2013). Self-criticism is also negatively related to goal progress among athletes (Powers, Koestner, Lacaille, Kwan, & Zuroff, 2009). Self-compassion is viewed as a key antidote to harsh self-criticism (Neff, 2003b) and is negatively related to rumination (Neff, Kirkpatrick et al., 2007). Further, evidence suggests that self-compassion attenuates negative reactions to distressing events, especially those connected to failure (Leary et al., 2007). Thus, rumination and self-criticism, as well as concern over mistakes, are issues that may be successfully targeted through self-compassion intervention. Concern over mistakes is a component of perfectionism.
and a significant negative correlate of self-compassion among women athletes (Mosewich, Kowalski et al., 2013).

Taken together, elements of self-compassion have potential to be applied to areas where women athletes seem to have difficulties with coping, including rumination, self-criticism, and concern over mistakes. Conceptually, self-compassion aids in changing maladaptive thoughts, feelings, and behaviours by allowing an individual to evaluate the self without self-condemnation, promoting more accurate perceptions of the situation (Neff, 2003b). When an individual faces challenge, setback, or evaluation, self-compassion permits the acknowledgement and evaluation of weaknesses but without excessive self-criticism and rumination, allowing the individual to move on with an effective focus (e.g., Neff, 2003b, 2009; Neff et al., 2005). A sense of common humanity would allow athletes to identify with others who share similar experiences or more easily accept support from others (A. B. Allen & Leary, 2010), which has been identified by varsity women athletes as a key strategy for coping with setbacks (Mosewich, Crocker, & Kowalski, 2013). When people realize that they are not alone in their experience, feelings of isolation can be reduced and adaptive coping can be promoted (Neff, 2003a). The mindfulness component of self-compassion might help athletes attain a better sense of balance, particularly related to thought patterns, expectations, and standards, as well as help to make decisions that better balance health and performance (Mosewich, Crocker, & Kowalski, 2013). Given the potential applications and benefits of self-compassion, developing an intervention to enhance this cognitive-emotional construct seems warranted.

Compassionate writing is an approach that can be used to generate self-compassionate mind-frames. State self-compassion has been successfully induced using compassionate letter writing in a brief intervention by Leary and colleagues (2007). Self-compassion was prompted
by having undergraduate students respond in writing to prompts that led them to think about a negative event in a way that fostered self-kindness, common humanity, and mindfulness – akin to Neff’s (2003b) definition of self-compassion. Results suggest that the self-compassion induction led to lower negative affect and increased personal acknowledgement about one’s role in the failure and was particularly effective for those already low in self-compassion. Leary et al.’s (2007) research not only outlines a medium appropriate for application in sport, but supports that self-compassion can be effectively promoted in a non-clinical population and that writing strategies produce beneficial outcomes.

The purpose of the present study was to investigate the effectiveness of a self-compassion intervention in a group of women varsity athletes. The 7 day intervention consists of an adaptation of Leary and colleagues’ (2007) writing exercise, as well as a psychoeducation component, designed to target self-compassion, self-criticism, rumination, and concern with mistakes. Using a 2 group (self-compassion intervention, attention control) x 3 time (pretest, post-test, 4 week follow-up) design, it was hypothesized that the self-compassion intervention group would have higher levels of self-compassion and lower levels of state self-criticism, state rumination, and concern over mistakes at post-test and follow-up, compared to an attention control group.

4.2 Method

4.2.1 Participants.

Sixty women athletes competing in varsity sport were recruited through team visits, emails, announcements through coaches, and poster displays from three universities in Western Canada. Eligible athletes were randomly assigned using a random number generator to either an experimental (self-compassion intervention; n = 31) or attention control group (n = 29) session.
Thirty-one athletes in the intervention group and 26 athletes in the attention control group showed up for the intervention and started the study. Of these, 29 athletes ($M_{age} = 20.28$ years, $SD_{age} = 2.25$ years) in the self-compassion intervention (experimental) group and 22 ($M_{age} = 20.27$ years, $SD_{age} = 1.08$ years) athletes in the attention control group completed all three phases of the study. Athletes who dropped out did not complete the questionnaire at post-test or follow-up and thus were not included in the analysis. There were no significant differences at pre-test (Time 1) between athletes who dropped out and athletes included in the analysis on any of the dependent variables or on age or eligibility year. Of the athletes who dropped out, five of the six were Caucasian (one was Chinese), one had made a national team, and all were team sport athletes. Athletes (92% Caucasian, 4% Black, 2% Aboriginal, 2% Chinese, 2% West Asian)\(^8\) were involved in varsity sport [basketball (19.3%), cross-country (3.5%), field hockey (5.3%), golf (5.3%), ice hockey (7.0%), rowing (3.5%), rugby (10.5%), skiing (3.5%), soccer (19.3%), swimming (3.5%), track and field (20.1%), volleyball (5.3%)\(^9\)] at the time of the study. Eight athletes were also current or former national team members. Athletes ranged from eligibility year 1 to 5 ($M = 2.61$, $SD = 1.27$).

Given that initial self-compassion levels may be a critical factor in intervention success (Leary et al., 2007) and initial scores on all variables may present floor and ceiling effects, athletes who self-identified as being highly self-critical in a way that is “less than constructive” were recruited for the current study. Athletes were pre-screened to ensure participation was personally appropriate for them.\(^{10}\) To accomplish this, questions at recruitment, as well as

---

\(^8\) Note that as participants could make more than one identification, percentages add to greater than 100%.

\(^9\) Note that some athletes were dual-sport athletes, so percentages will not add to 100%.

\(^{10}\) Thus, it was the aim to select athletes who were self-critical enough to potentially benefit from the intervention, but not so self-critical to need more intensive clinical intervention.
statements in the consent form and at the beginning of the initial (psychoeducation) session, were directed to the athletes to ascertain if any athlete felt her self-criticism was getting in the way of her daily functioning. Athletes were told if this was the case there were other resources in place that would be better suited to them and the researcher could facilitate access to such resources. This approach was designed with the help of two registered psychologists with expertise in screening and referral. No instance of referral occurred in the present study.

4.2.2 Procedure.

After obtaining ethical approval, a pilot study was conducted with four women in their twenties with athletic experience (as either current or former athletes) to ensure the clarity, length, and readability of the questionnaire packages. Based on the feedback from the pilot study, minor adjustments were made to the questionnaire packages, and the approximate time commitment for the questionnaire packages was determined to be 10-15 minutes. Additionally, the protocol for each group outlined below (i.e., psychoeducation presentation, applied practice, explanation of modules, and completion of five modules over a 7 day period) was piloted with each of the women to ensure clarity of delivery. Pilot participants were asked to complete the entire intervention protocol to allow for adequate feedback on feasibility and clarity of the proposed intervention tasks. Minor changes to wording and instructions were made based on feedback from the pilot study.

Eligible athletes participated in an initial group session. Separate sessions were run for the self-compassion intervention group and the attention control group, as different information needed to be presented to these two groups. During the session, athletes listened to a psychoeducation presentation, participated in an applied example writing task, and received a book of writing modules to complete over the next 7 days. Thus, the structure for each group
was identical, but the content (detailed below) differed between the self-compassion group and the attention control group. As recruitment was ongoing, multiple group sessions were run. Group sessions were small, ranging in size from two to eight participants. At the beginning of the initial session, participant consent was obtained (see Appendix K for consent form) and the pre-test questionnaire package was administered. Following completion of the questionnaire package, all participants participated in the psychoeducation presentation and applied component and received the instructions and materials for the writing modules to be completed over the next 7 days. Athletes had the option of signing up for email or text message reminders to complete the modules, which were sent out every 2 days. One week following the completion of the 7 day protocol (writing modules), athletes completed a post-test questionnaire online using a secure survey tool. This timeline allowed for the skills and mind-frames taught in the intervention to be both learned and (potentially) applied in the sport context. This questionnaire package was identical to the one distributed at the initial session, and also included two items pertaining to treatment fidelity. A final follow-up questionnaire was distributed online 1 month later. This questionnaire was again identical to the initial one, but also included a form to provide participants the opportunity to give feedback about their experiences with their treatment and a brief 1-item measure to ascertain the frequency with which athletes in the self-compassion intervention group continued to use their skill. At this point, participants in the attention control group were given the opportunity to receive the self-compassion treatment (though no further data were collected). Sixteen athletes participated.

Athletes received five dollars for completing the first portion of the study (questionnaire and group session) and were entered to win one of five $50 gift cards to Amazon.ca for completing the online questionnaires. They received an additional ballot entry for each online
questionnaire they completed. Participants provided an email address, which was used to contact participants for the 1 week post-test and 1 month follow-up assessment, as well as to match responses from the three time-points.

4.2.3 Measures.

4.2.3.1 Measures delivered at all time-points.

4.2.3.1.1 Demographics. General demographic information (age and sociocultural information), as well as sport specific information (type of sport, level of sport participation, and year of eligibility in the varsity system) was collected (see Appendix L).11

4.2.3.1.2 Self-compassion. Self-compassion was measured using the 26-item Self-Compassion Scale (SCS; Neff, 2003a, see Appendix D). The SCS assesses six different aspects of self-compassion: self-kindness (5 items, e.g., “I try to be understanding and patient toward aspects of my personality I don't like.”), self-judgment (5 items, e.g., “I'm disapproving and judgmental about my own flaws and inadequacies.”), common humanity (4 items, e.g., “I try to see my failings as part of the human condition.”), isolation (4 items, e.g., “When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world.”), mindfulness (4 items, e.g., “When something painful happens I try to take a balanced view of the situation.”), and over-identification (4 items, e.g., “When I’m feeling down I tend to obsess and fixate on everything that’s wrong.”). Responses are given on a scale from 1 (almost never) to 5 (almost always; Neff, 2003a). Total self-compassion scores were calculated by reverse scoring the negative subscale items (self-judgment, isolation, and over-identification) and then

---

11 In the questionnaire at each time-point, athletes also completed a 1-item sport performance rating and a 1-item sport satisfaction rating, as well as wrote a response to: “Imagine that you performed well below what was expected in a competition. Please provide a brief description below about how you would (a) feel and (b) react to this event.” These data were not used in the analysis for the present study.
computing a total mean. Scores from the SCS have psychometric support (Leary et al., 2007; Mosewich et al., 2011; Mosewich, Kowalski et al., 2013; Neff, 2003a, 2009; Neff et al., 2005; Neff, Kirkpatrick et al., 2007).

4.2.3.1.3 State rumination. State rumination connected to recent negative events in sport was assessed using three questions adapted from Puterman, DeLongis, and Pomaki (2010): (1) “Did you find it hard to stop thinking about the problem afterward?”, (2) “When thinking about the problem afterward, did your thoughts tend to dwell on negative aspects of it, or how badly you felt about it?”, and (3) “Did thinking about the problem tend to make the problem seem worse or make you feel worse about it?” (see Appendix M). Participants were asked to respond based on “the most significant negative event in sport over the past week that was personally demanding (such as a setback or failure)” on a scale ranging from 1 (not at all) to 5 (a lot). The original items reflected a Cronbach’s alpha of .90 in a community sample (Puterman et al., 2010). In the present study, a total mean was used as an indicator of state rumination.

4.2.3.1.4 State self-criticism. Overall levels of self-critical thought were assessed with a 7-item measure by Gilbert and Procter (2006), modified for the present study to specify a focus on a recent sporting event (see Appendix N). Participants were asked to “think about the most significant negative event in sport over the past week that was personally demanding (such as a setback or failure)” and answer about the frequency, power, intrusiveness, length, and feelings associated with self-critical thought connected to negative event in sport. Responses ranged from 1 to 10, with anchor phrases relevant to the question (e.g., “How intrusive were your self-critical thoughts about a recent negative sport event?”; 1 = “not at all” to 10 = “very intrusive”). In the present study, a total mean was used as an indicator of state self-criticism.
4.2.3.1.5 Concern over mistakes. The ‘Concern over Mistakes’ subscale of the Sport Multidimensional Perfectionism Scale-2 (SMPS-2; Gotwals & Dunn, 2009) was used to assess the degree to which athletes experience concern over their mistakes in a competitive sport context (see Appendix O). The subscale consists of 8 items (e.g., “Even if I fail slightly in a competitive setting, for me, it is as bad as being a complete failure.”) with responses ranging from 1 (strongly disagree) to 5 (strongly agree). Subscale items have exhibited support for internal consistency in a varsity athlete sample (Mosewich, Kowalski et al., 2013). Given the parameters of the present study, a temporal aspect to the instructions was included, asking participants to “answer each question thinking back over the past week in your sport”. Additionally, the original wording used “competition” as the context; however, in order to consider both training and competition contexts, the phrase “competitive settings” was used. It was explicitly stated in the instructions that competitive settings can include both training and competition situations. Mean scores indicated level of concern over mistakes.

4.2.3.2 Additional measure delivered following intervention (post-test).

4.2.3.2.1 Treatment Fidelity. To gauge participant adherence and responsiveness, two items were included at the end of the post-test questionnaire package (see Appendix P). Participants were asked to indicate, on a 0 to 5 scale, “how many times during the one week intervention did you engage in / complete the assigned writing task?”. They were also asked “To what extent did you engage in and make use of the writing activity?” and rated their engagement on a 1 (not at all) to 5 (very much) scale.

4.2.3.3 Additional measure delivered at the 1 month follow-up.

4.2.3.3.1 Feedback. At the 1 month follow-up, all athletes were provided with an opportunity to provide open-ended feedback surrounding the intervention condition in which
they took part (see Appendix Q). Additionally, to get an understanding of continued use over the month since the intervention, self-compassion intervention participants were asked to rate the frequency of use of their skill from 1 (never) to 5 (very often; also included in Appendix Q).

4.2.4 Intervention design.

4.2.4.1 Self-compassion intervention group. The self-compassion intervention consisted of a psychoeducation session and a series of writing modules to be done over the course of a 7 day period. The psychoeducation component began with a 10 minute presentation (see Appendix R for outline) that consisted of a brief overview of basic stress and coping ideas in sport and background information on self-compassion. The premise of the construct was explained, and relevant empirical work was highlighted, along with an explanation of why engaging in a self-compassionate mind-frame might be helpful for managing challenges in sport. Evidence against the construct promoting complacency was outlined, and self-compassion was promoted as an adaptive way to conceptualize and deal with challenges that may promote a more attuned focus to sport-specific tasks. These are important justifications to make, as Gilbert (2005) has suggested that people who have high expectations of themselves and have a strong focus on performance may fear that self-compassion may interfere with goal progress and attainment. One of the most common barriers to self-compassion is fear of promoting self-indulgence or creating a deterrent to motivation (Gilbert, McEwan, Matos, & Rivis, 2011). This model of justification is similar to the approach used by Neff and Germer (2013) at the start of their Mindful Self-Compassion program, where they explain what self-compassion is, why it is necessary for well-being, where is it useful, and provide evidence against self-compassion as self-indulgent or complacent.
Following the presentation, the athletes participated in an applied example of self-compassionate writing (see Appendix S for handout). Having the athletes engage in the activity provided an opportunity for the researcher to explain in detail the writing exercises that the athletes were to perform over the next week and answer any athlete questions. Athletes were instructed to “Think about a negative event in sport that occurred over the past week that was personally demanding”. They were asked to provide a description of the event, including what happened leading up to the event, who was there, what happened in terms of the event, and any thoughts and actions that happened during the event. After completion of this task, athletes responded to three prompts designed to promote thinking about the event in a self-compassionate way. This writing task is based on the writing self-compassion induction by Leary and colleagues (2007):

1. **Common humanity** – Participants were asked to “list ways in which other people experience similar events” (to the one they just described).

2. **Self-kindness** – Participants were asked to “write a paragraph expressing understanding, kindness, and concern to yourself”. They were instructed to “write as if you are communicating to a close friend in the same situation”. It was explained that often people are much harder on themselves than they would be to others in the same situation. Taking a step outside the situation often makes it easier to give advice and see the issue more clearly.

3. **Mindfulness** – Finally, participants were asked to “describe the event in an objective and unemotional manner”, promoting acknowledgement and balance without overidentification.

It was explicitly stated that there was no “right” or “wrong” way to write and that the athletes’ personal entries would remain private to them. It was made clear that written responses would not be part of any analysis or read by the researcher. Participants were simply asked to be
honest in the entry and reflect on each question, as well as spend at least 10 minutes providing thorough and well-thought out responses.

After completing the applied task, each athlete was given a module booklet (see Appendix T) to use for her writing tasks over the next week. Inside the booklet was a reminder of the protocol. The booklet contained five exercises to be completed over the course of the next week. Each module was some variation of the practice applied task and was explained by the researcher during the session.

**Module 1 – Considering negative events.** Athletes were asked to think about the most significant setback or failure in sport over the past year that was personally demanding. They were asked to explain what happened leading up to the event, who was there, what happened in terms of the event itself, and what specific thoughts and actions happened during the event.

**Module 2 – Consider commonalities.** Athletes were asked to reflect on the negative event described in Module 1. They were asked to think about ways in which other people also experience similar events, and as they brainstormed, they were to make a list.

**Module 3 – Consider support.** Athletes again were asked to think back to the event described in Module 1. They were then asked to write a paragraph expressing understanding, kindness, and concern to themselves, and write as if they were communicating to a close friend in the same situation.

**Module 4 – Consider objectivity.** Once more, athletes were asked to reflect back on the event discussed in Module 1. They were asked to focus on this event again, but this time were instructed to think and write about the event in an objective and unemotional manner.

**Module 5 – Considering putting perspectives into practice.** This final module was designed to give the athletes an opportunity to apply all of the skills once more with a more
recent event, using an identical layout to the activity in the applied portion of the group session. Athletes were again asked to think about a negative event in sport that occurred over the past week that was personally demanding, and respond to each of the self-compassion prompts.

4.2.4.2 Attention control group. The attention control group received a format identical to the self-compassion intervention group - psychoeducation presentation, applied writing task in a group setting, and five modules to complete over the course of the next week. However, the focus was on general writing and the topics chosen were not expected to have any influence on the study variables. Athletes received a 10 minute psychoeducation presentation regarding use of writing in sport (see Appendix U for outline). Content consisted of where and how writing is often used in sport (e.g., training diaries, journaling). Just as in the self-compassion intervention, following the presentation, the athletes participated in an applied example (see Appendix V). Athletes were asked to practice their documenting/writing skills and describe in writing a technical skill in their sport, explain why it is important, and actions one can take to develop the skill. After completing the applied task, each athlete was given a module booklet to use for her writing task over the next week (see Appendix W). Inside the booklet was a reminder of the protocol. The booklet contained five exercises to be completed over the course of the next week. The researcher went over the instructions for each exercise with the athletes and clarified any questions. The writing tasks consisted of general writing topics, including writing about a current event in sport, hazing in sport, favorite varsity sport memory, technical issues in sport, and reflecting on what it means to be a varsity athlete. As with the self-compassion intervention group, the modules were not read by the researcher and this was made clear to the participants.
4.2.5 Data analysis.

The data were analyzed by a 2 (group) x 3 (time) mixed factorial MANOVA. Though there is debate in the literature regarding the appropriateness of using univariate statistics following multivariate analysis (see Huberty & Morris, 1989), follow-up univariate ANOVAs were conducted to further examine significant effects to test the hypothesis. Significant ANOVAs were followed up with pairwise comparisons with a Bonferroni adjustment ($p < .0125$) to examine differences between groups.

4.3 Results

Significant multivariate effects were found for the group x time interaction ($Wilks' \lambda = .566, F(8, 42) = 4.03, p < .01, \eta^2 = .43$). No significant main effects were found for group ($Wilks' \lambda = .847, F(4, 46) = 2.08, p = .10, \eta^p^2 = .15$) or time ($Wilks' \lambda = .835, F(8, 42) = 1.04, p = .43, \eta^p^2 = .18$). Follow-up ANOVAs revealed each outcome variable was significant at the univariate level for the group x time interaction: self-compassion [$F(1.94, 94.84) = 9.38, p < .01, \eta^2 = .16$], rumination [$F(1.86, 91.60) = 7.55, p < .01, \eta^2 = .13$], self-criticism [$F(1.97, 95.53) = 7.75, p < .01, \eta^2 = .13$], and concern over mistakes [$F(1.52, 74.49) = 7.59, p < .01, \eta^2 = .13$]. For all outcome variables, pairwise comparisons revealed no significant differences between groups at pre-test (Time 1) and significant differences ($p < .05$) at 1 week post-test (Time 2) and 1 month follow-up (Time 3). Means and standard deviations for each group at each time-point, as well as effect size for group differences, are presented in Table 4.1.

All athletes completed at least three of the five modules (self-compassion: $M = 4.52, SD = 0.69$; attention control: $M = 4.67, SD = 0.58$) and reported engagement in intervention tasks on the high end of a 5-point scale (self-compassion: $M = 4.02, SD = 0.75$; attention control: $M = 4.08, SD = 0.67$).
3.86, $SD = 0.71$). Use of the skills by the self-compassion group at the 1 month follow-up were also above the midpoint on a 5-point scale ($M = 3.11, SD = 1.01$).

**4.4 Discussion**

The self-compassion intervention was successful, resulting in higher levels of self-compassion, and lower levels of state self-criticism, state rumination, and concern over mistakes in a group of varsity women athletes, compared to an attention control group. A moderate to strong effect size was found for this intervention (Murphy & Myers, 2004) and achieved standards for practical significance (C. J. Ferguson, 2009), further highlighting the potential of this self-compassion promotion strategy in sport. The present intervention focused on processing negative events in sport, and results suggest that promotion of self-compassionate mind-frames through psychoeducation and writing programs can help athletes to deal with the self-criticism, rumination, and concern over mistakes that accompany such events. From a conceptual stance, self-compassion has been suggested to be a potential resource in sport (Mosewich et al., 2009, 2011; Mosewich, Crocker, & Kowalski, 2013) and the present study is a step towards establishing efficacy and effectiveness support for the intervention approach. The present study is the first to examine self-compassion in an intervention framework in the sport domain and provides empirical evidence to support promotion of self-compassionate mind-frames through psychoeducation and writing exercises.

The intervention structure was intended to teach athletes about self-compassion and foster a self-compassionate mind-frame when managing difficult events in sport by encouraging them to apply elements of self-compassion to a negative situation. The length of the intervention was designed to provide athletes with an opportunity to learn, apply, and practice principles of self-compassion in sport, but also remain feasible in terms of time commitment given the
schedules of student-athletes. The intervention outlined in the present study is less involved than the majority of the interventions involving self-compassion to date (e.g., Gilbert & Irons, 2004; Gilbert & Procter, 2006; Kelly et al., 2010; Neff & Germer, 2013). The intervention design allotted time for exposure and practice, hopefully fostering application of self-compassion mind-frames when dealing with negative events in sport. Given the adherence rates suggested at the 1 month follow-up, many athletes continued to use self-compassionate mind-frames and self-compassion skills beyond the structured 1 week intervention period. The present intervention structure could integrate easily into existing approaches and routines. The outlined approach could be incorporated into mental skills consulting and other applied frameworks by mental skills consultants, coaches, parents, trainers, and athletes themselves. However, prior to widespread use of such a program, evaluation of intervention fidelity, establishment of intervention efficacy and effectiveness, and replication of results will help support the value of this intervention in women’s sport programs.

4.4.1 Future direction and application.

In addition to considering integration, the present intervention is also adaptable to other contexts. The present study, combined with other work in the area of self-compassion, provides a foundation for other empirically-derived and theoretically-grounded interventions. One potential area of expansion is the body domain, particularly in reducing body-related self-conscious emotion. Given that sport is a highly evaluative context for women, with many athletes feeling evaluated on both their performance and appearance (Greenleaf, 2002; Krane et al., 2001; Mosewich et al., 2009), self-conscious emotion can arise from self-evaluation and how one perceives the evaluation of others (Leary, 2004; Tracy & Robins, 2004). Recent research has reflected the potential benefits of self-compassion to manage self-conscious emotion and social
physique anxiety (Leary et al., 2007; Mosewich et al., 2011). Thus, self-compassion intervention may help to decrease body-related emotion among women participating in sport, which may improve sport participation outcomes.

An additional area for expansion involves the inclusion of adolescent athletes, and advancing knowledge of intervention effectiveness in a population known to face unique pressures in terms of appearance, performance, and societal ideals (Botta, 2003; Mosewich et al., 2009; Rainey, McKeown, Sargent, & Valois, 1998). Adolescence is a period of life where self-compassion may be very useful, yet is extremely low (Neff, 2003b). Providing adolescent athletes with the skills and resources to manage performance and body-related issues is a step towards successful and enjoyable sport experiences that may translate into a lifetime of sport participation and positive growth and development. Self-compassion may help to achieve this goal, especially given the relation between self-compassion and positive affective and behavioural tendencies among adolescent women athletes (Mosewich et al., 2011).

### 4.4.2 Intervention evaluation.

Prior to integration and adaptation of the present approach, a critical evaluation of the present intervention is required. Evaluation of intervention fidelity in terms of adherence to the intervention, exposure or dose, quality of delivery, participant responsiveness, and program differentiation are important elements in intervention research (Carroll, Horner, Rew, & Torres, 2007). The standardized protocol in the present study supports adherence, regulates dosage and exposure, and helps to foster quality of delivery, which increases confidence in conclusions about the association between the administered treatment and the outcome (Calsyn, 2000). Measures of intervention fidelity in the outcome analyses enabled consideration of and support for adherence and participant responsiveness, though the self-report nature was a limitation.
Program differentiation involves identifying essential features of an intervention (Carroll et al., 2007). Such examination was not possible with the current study design, but is a direction for future research. Gaining insight into which aspects of the intervention are most important (psychoeducation, writing, or both), and how it is best administered (e.g., by a mental skills consultant, the athlete herself, the coach) will inform future facilitation of this intervention, tailoring approaches best suited to the population.

Intervention efficacy and effectiveness are also important to consider when evaluating the self-compassion intervention work, as these must be upheld before widespread dissemination of an approach is warranted (Flay et al., 2005). Explicit criteria for efficacy, effectiveness, and dissemination are discussed in detail elsewhere (Flay et al., 2005), but a critical evaluation of this study and possibilities for next steps are prudent. Efficacy surrounds the beneficial effects of a program under optimal conditions of delivery (Flay et al., 2005). The present study fulfills requirements such as defined samples from defined populations, psychometrically sound measures and data collection procedures, appropriate statistical approaches, positive findings, and sustained results. However, for a study to be labelled as efficacious, it should be replicated at least once, so additional trials are warranted. Also, although changes to outcome variables in the present study were maintained at the 1 month follow-up, sustained results over a longer term (i.e., 6 months) are advocated (Flay et al., 2005). Evaluation of effectiveness involves assessing the quality of an intervention in affecting outcome variables in real world conditions (Flay et al., 2005). The present study showed expected changes in all outcome variables with a moderate to large effect size, implemented in real world conditions using both intervention and control groups that were randomly assigned, allowing for causal claims and supporting effectiveness, while also minimizing many threats to internal validity (Flay et al., 2005). The standardized
protocol provides support for effectiveness, as does the clear importance of the intervention to the specified population (Flay et al., 2005). Future research will need to address use in other athletic groups, as well as consider moderating factors that may influence intervention effectiveness, such as athletic success and failure, and coaching/learning environment.

4.4.3 Summary and implications.

In conclusion, the present study provides support for the utility of a self-compassion intervention in sport. This speaks to the importance of helping athletes to develop a wide array of mental skills and coping resources, both traditional and unique, and to facilitate their implementation into regular practice. The development of self-compassion seems to hold merit, particularly among women athletes who self-identify as being highly self-critical. As self-compassion in sport continues to be considered and utilized, efficacy, effectiveness, mode of delivery, and accessibility to the population need to be continually evaluated to ensure we are providing a constructive tool that can be widely utilized to help in the pursuit of not only successful, but enjoyable sport participation for women.
Table 4.1

Means and Standard Deviations for Self-Compassion, State Rumination, State Self-Criticism, and Concern Over Mistakes for the Self-Compassion (Experimental) and Attention Control Groups.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Time 1</th>
<th></th>
<th></th>
<th></th>
<th>Time 2</th>
<th></th>
<th></th>
<th></th>
<th>Time 3</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>α</td>
<td></td>
<td>M</td>
<td>SD</td>
<td>α</td>
<td>Cohen’s d</td>
<td>M</td>
<td>SD</td>
<td>α</td>
<td>Cohen’s d</td>
</tr>
<tr>
<td>Self-Compassion</td>
<td>Experimental</td>
<td>2.90</td>
<td>0.61</td>
<td>.88</td>
<td></td>
<td>3.12</td>
<td>0.64</td>
<td>.93</td>
<td>0.79**</td>
<td>3.20</td>
<td>0.74</td>
<td>.95</td>
<td>0.82**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.83</td>
<td>0.44</td>
<td>.79</td>
<td></td>
<td>2.64</td>
<td>0.58</td>
<td>.91</td>
<td></td>
<td>2.67</td>
<td>0.56</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>State Rumination</td>
<td>Experimental</td>
<td>3.56</td>
<td>0.96</td>
<td>.81</td>
<td></td>
<td>3.29</td>
<td>0.85</td>
<td>.84</td>
<td>-0.66*</td>
<td>2.88</td>
<td>1.04</td>
<td>.82</td>
<td>-1.16**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.70</td>
<td>0.83</td>
<td>.86</td>
<td></td>
<td>3.90</td>
<td>1.00</td>
<td>.90</td>
<td></td>
<td>4.03</td>
<td>0.95</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>State Self-Criticism</td>
<td>Experimental</td>
<td>5.87</td>
<td>1.80</td>
<td>.86</td>
<td></td>
<td>4.94</td>
<td>1.67</td>
<td>.89</td>
<td>-0.89**</td>
<td>4.58</td>
<td>1.76</td>
<td>.88</td>
<td>-0.91**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>5.99</td>
<td>1.69</td>
<td>.86</td>
<td></td>
<td>6.43</td>
<td>1.68</td>
<td>.88</td>
<td></td>
<td>6.13</td>
<td>1.66</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>Concern Over Mistakes</td>
<td>Experimental</td>
<td>3.19</td>
<td>0.73</td>
<td>.83</td>
<td></td>
<td>3.06</td>
<td>0.84</td>
<td>.92</td>
<td>-0.63*</td>
<td>3.00</td>
<td>0.87</td>
<td>.87</td>
<td>-0.78**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.31</td>
<td>0.60</td>
<td>.78</td>
<td></td>
<td>3.56</td>
<td>0.75</td>
<td>.83</td>
<td></td>
<td>3.64</td>
<td>0.77</td>
<td>.81</td>
<td></td>
</tr>
</tbody>
</table>

Note. Time 1 = baseline; Time 2 = 1 week post intervention; Time 3 = 1 month post intervention. Cohen’s d is presented as a level of effect size for the difference between the experimental and attention control groups. No significant differences were found at Time 1. Significant differences between groups were found for all dependent variables at Time 2 and Time 3 (* = p < .05, ** = p < .01).
Chapter 5: General Discussion

The present program of research provides an increased understanding about self-compassion in women athletes. Competitive sport involves managing high level demands that many athletes characterize as stressful (Hanin, 2010; Hoar et al., 2006; Mosewich, Crocker, & Kowalski, 2013; Rumbold, Fletcher, & Daniels, 2012). Self-compassion is related to a number of meaningful cognitive and emotional constructs related to the stress process in athletes such as concern over mistakes, doubts about actions, self-criticism, excessive negative rumination, avoidance coping, cognitive appraisals, and affective experiences (Mosewich, Crocker, & Kowalski, 2013; Mosewich, Kowalski et al., 2013). Prompting athletes to take a self-compassionate approach to negative events appears to be useful in managing potentially dysfunctional cognitions and emotional experiences (Mosewich, Crocker, Kowalski, & DeLongis, 2013). Overall, the present program of research makes a number of contributions to the area of women’s sport and mental health and provides a foundation for further investigation of issues and application of knowledge.

The purpose of this dissertation was to explore the role of self-compassion in the sport context. More specifically, this program of research sought to (a) better understand setback experiences faced by women athletes and determine if elements of self-compassion were evident
(or relevant) in coping (Study 1); (b) examine the relation between self-compassion and aspects of perfectionism, as perfectionism presented a delicate balance for athletes in Study 1 (Study 2); (c) determine the role of self-compassion in the stress and coping process (Study 2); and (d) evaluate the effectiveness of a self-compassion intervention in managing negative events in sport (Study 3). Previously, there was little empirical work on self-compassion in sporting populations. However, it was known that self-compassion showed significant relations to a number of cognitive and behavioural constructs relevant to female athletes, specifically a negative relation with shame proneness, guilt-free shame proneness, social physique anxiety, objectified body consciousness, fear of failure, and fear of negative evaluation (Mosewich et al., 2011). Self-compassion explained variance beyond self-esteem on shame proneness, guilt-free shame proneness, shame-free guilt proneness, objectified body consciousness, fear of failure, and fear of negative evaluation in a group of adolescent women athletes (Mosewich et al., 2011). Leary and colleagues (2007), using a hypothetical scenario of losing an important game for a team (amongst undergraduate students), found that self-compassion was negatively related to negative affect, thought catastrophizing, and personalizing. Thus, the potential connection of self-compassion in sport was evident, but there were still questions to be answered in order to better situate the construct in sport, including its relation with sport-relevant cognitive and behavioural constructs, fit within the stress and coping process, and effectiveness of application.

The present program of research has continued to build a foundation for self-compassion in the sport context and has made a number of contributions in advancing knowledge. Study 1 not only focused on ascertaining the types of stressors experienced by women athletes and the employed coping strategies and their effectiveness, but also explored if self-compassion was employed in any capacity in dealing with negative events in sport. Though no evidence arose in
support of the use of self-compassion, the athletes attested to desiring certain skills, such as a more constructive approach to self-criticism and a more adaptive and effective focus to help them manage issues arising in sport. Self-compassion fit many of these highlighted desired assets, pointing to further exploration. While Study 2 did not find direct links between self-compassion and problem- or emotion-focused coping, there was a negative relation with avoidance coping, threat appraisal, and negative affect and a positive relation with control appraisal, suggesting self-compassion may play an adaptive role in the stress and coping process. Additionally, self-compassion was related to social evaluative aspects of perfectionism, most notably doubts about actions and concern over mistakes, which holds implications for coping with setback experiences. Finally, Study 3 provided support that self-compassion can be fostered, and the application of self-compassion skills and mindsets effectively decreases self-criticism, rumination, and concern over mistakes related to sport difficulties for highly self-critical women athletes. Taken together, this program of research has advanced understanding of self-compassion in sport by providing evidence that women athletes seem self-aware of the benefits of approaching negative events in sport with elements consistent with the construct of self-compassion. Though self-compassion is not a mainstream term, support for the construct arose through athletes showing awareness of gaps in coping resources and attesting to a need for skills directed at managing difficult events in sport that could be met with self-compassionate approaches. Systematic relations between self-compassion and dimensions of perfectionism and aspects of the stress and coping process were also supported, providing further support of self-compassion’s theoretical and empirical connection to evaluative processes and coping in women athletes. Finally, fostering self-compassionate approaches to difficult events in sport seems to have positive results.
While the studies within this dissertation allowed for expansion of knowledge, this chapter discusses some key issues to consider when evaluating the present program of research, and as the field positions towards future work in the area. Issues surrounding the mechanisms of self-compassion, implications surrounding knowledge transfer, self-regulation promotion, self-compassion within positive psychology, potential drawbacks of self-compassion, and epistemological stance are discussed.

5.1 Mechanisms of Self-Compassionate Mind-frames: Implications for Application

To begin, a discussion surrounding the mechanisms that underlie self-compassionate mind-frames is prudent to begin to move towards a working framework of self-compassion that will better inform future investigation and application of the construct in sport. This dissertation program of research illustrates the effectiveness of self-compassion, allowing athletes to approach negative events with self-kindness, common humanity, and mindfulness, while avoiding harsh self-judgment, isolation, and overidentification. Research suggests higher self-compassion is related to a variety of adaptive constructs, including life-satisfaction, social connectedness, emotional intelligence, mastery goals, happiness, optimism, positive affect, wisdom, personal initiative, curiosity and exploration, agreeableness, extroversion, and conscientiousness (e.g., Adams & Leary, 2007; Leary et al., 2007; Neff, 2003a; Neff et al., 2005; Neff, Rude et al., 2007). Self-compassion also shows negative relations to less adaptive cognitive and behavioural constructs relevant to sport (Mosewich et al., 2011) and seems to be helpful in managing negative issues relevant to sport (Mosewich, Crocker, Kowalski et al., 2013; Mosewich, Kowalski et al., 2013). While research supports self-compassion having a beneficial influence, what remains unclear is how exactly self-compassion is functioning, or more specifically, how it is influencing certain variables. There are several potential mechanisms,
including issues surrounding emotion regulation (attentional deployment, appraisal processing, cognitive restructuring, and response modulation), as well as cognitive schemas.

5.1.1 Emotion regulation.

While the origin of self-compassion connects to Buddhist tradition, Kristin Neff is responsible for much of the foundation and conceptualization of self-compassion within general psychology. Though potential mechanisms have not been explicitly identified and tested, Neff and colleagues (2005) have positioned self-compassion as an emotion regulation strategy focused on reducing negative emotions and promoting adaptive mind-frames. Emotion regulation involves influencing emotions, specifically in terms of which emotions we experience, when and how we experience them, and how they are expressed (Gross, 2010). Some sport researchers have argued that emotion regulation is a critical part of managing the athletic stress process (Hanin, 2010; Uphill & Jones, 2012). Emotions can be an asset, facilitating adaptation, preparing appropriate behavioural responses and guiding action; however, they can also be detrimental if they are an inappropriate type and/or have inappropriate timing or intensity (Gross, 2010; Hanin, 2010; Uphill & Jones, 2012).

Gross (2010) outlined a process model of emotion regulation that groups emotion regulation strategies into five families: situation selection, situation modification, attentional deployment, cognitive change, and response modulation. The first two aforementioned families are focused on situation. Attentional deployment, cognitive change, and response modulation involve attention, appraisal, and response (respectively) and form the strongest conceptual link with self-compassion. This model will be used to facilitate the discussion of potential mechanisms that underlie the functioning of self-compassion.
5.1.1.1 Attentional deployment. Attentional deployment involves influencing emotional responses by directing attention within a situation (Gross, 2010). So, in the context of self-compassion, putting more attention on self-kindness, common humanity, and mindfulness, as opposed to self-judgement and feelings of isolation and overidentification, could influence how an athlete responds emotionally (as well as cognitively and behaviourally) to a sporting situation. In Study 3, the self-compassion intervention may be affecting specific cognitions by directing athletes’ attention to thoughts related to self-kindness, common humanity, and mindfulness. This attention might also promote greater self-awareness. More insight into the function of such attention redirection, and assurance that it is a positive, adaptive shift, would need to be established to ensure distraction was not the main function. Past research by Neff and colleagues (2005), as well as in this dissertation program of research (Mosewich, Kowalski et al., 2013), provides evidence to suggest the latter is not the case. Self-compassion was negatively related to avoidance coping (Mosewich, Kowalski et al., 2013; Neff et al., 2005), supporting an absence of distraction and avoidance. Rumination is another form of attentional deployment (Gross, 2010). This prolonged focus on an emotion-eliciting event can lead to rigid patterns in attention (Gross, 2010) and can increase the duration and intensity of negative emotion (Bushman, 2002; Ray, Wilhelm, & Gross, 2008). However, Study 3 clearly supported the effectiveness of the self-compassion intervention in the management of rumination. Thus, self-compassion may be serving as a strategy to focus attention in an adaptive manner.

5.1.1.2 Cognitive change and appraisal processes. Cognitive change, another family of emotion regulation strategies, is linked to appraisal (Gross, 2010). It is plausible that self-compassion functions by changing initial appraisal processes or through reappraisal. Self-compassion may help prompt change in appraisal patterns, resulting in different approaches to
and perceptions of problems, situations, and the self that are arguably more adaptive. Self-compassion has been suggested to promote accurate and adaptive perceptions of situations (Neff, 2003b), supporting a link to appraisal processes. With reappraisal as a mechanism, an athlete with sufficient levels of self-awareness would recognize maladaptive cognitive processes, and self-compassion skills or strategies would be applied to change the meaning of a situation and, as a result, change the emotional reaction connected to that event (Gross, 2010). Reappraisal is a changed appraisal that follows an earlier appraisal in the same situation and is modified based on new information (Lazarus & Folkman, 1984). Reappraisal can lead to decreased negative emotional experience and behaviour (Dandoy & Goldstein, 1990; Gross, 1998). Since reappraisal underlies the changes in the person-environment situation, if the meaning is changed, then the resulting emotion and subsequent cognitive and behavioural responses will also change (Lazarus, 2000). If appraisal processes are the mechanism, a challenge would arise in determining whether self-compassion promotes adaptive initial appraisal, or if self-compassion skills facilitate reappraisal. Additionally, challenges in capturing such appraisal (and reappraisal) processes would be present and creative methodologies such as audiodiaries or writing exercises may be needed to ascertain shifts in cognition. Future research in the area needs to be cognisant of such challenges.

5.1.1.3 Cognitive restructuring. Under the scope of cognitive change, it also seems pertinent to discuss cognitive restructuring as a potential mechanism underlying alterations in appraisal processes. A. B. Allen and Leary (2010) conceptualize self-compassion within cognitive restructuring, which involves altering one’s view of a situation to appraise it more positively. This can be accomplished by being optimistic, engaging in positive thought, and not ruminating on negative aspects of the situation (A. B. Allen & Leary, 2010). A. B. Allen and
Leary highlighted how self-compassion involves aspects of cognitive restructuring, as individuals high in self-compassion view negative events in a less catastrophic way compared to those low in self-compassion. Students with higher self-compassion reported using the coping strategies of acceptance and positive reinterpretation after receiving a poor midterm grade significantly more than students exhibiting lower levels of the construct (Neff et al., 2005). An additional example is evident in work by Leary and colleagues (2007). Upon looking back at a negative event, people high in self-compassion were less likely to have negative thoughts about the self and thoughts related to questioning why such experiences always happen to them (Leary et al., 2007). Most intervention work in self-compassion also tends to take what appears to be a cognitive restructuring approach (e.g., Adams & Leary, 2007; Gilbert & Irons, 2004; Gilbert & Procter, 2006; Kelly et al., 2010; Leary et al., 2007; Shapira & Mongrain, 2010). Study 3 could be categorized under cognitive restructuring as well. It is probable that the self-compassionate writing activities serve to promote reflective skills and self-awareness to identify problematic cognitions and their distortions, and incorporate skills and focus geared at rationalizing and disputing, and subsequently changing cognitions, which aligns with cognitive restructuring approaches (Hope, Burns, Hyes, Herbert, & Warner, 2010).

5.1.1.4 Response modulation. The final family to be discussed in the realm of emotion regulation is response modulation, which involves a direct influence on physiological, behavioural, or experiential responses (Gross, 2010). Using self-compassion skills may decrease emotional responses such as rumination and self-criticism. Thus, with response modulation, a reaction or response is changed directly due to self-compassion. Given the associations with the stress and coping process in Study 2, however, it may be difficult for self-compassion to only alter end reactions, without regard to appraisal. Thus, this alternative seems less likely than the
other proposed mechanisms. However, if response modulation was at play, it could be linked to emotion suppression (Gross, 2010). Two theories regarding outcome of emotion suppression exist (Gross, 2010). The first presents possible negative connotations, as it is posited that suppression of emotion leads to increased responses in other areas, such as physiological reactivity, potentially triggering additional issues (Gross, 2010). However, the other theory presents a more adaptive alternative, with emotion suppression muting any subsequent emotional responses (Gross, 2010), stopping an athlete from getting carried away, or becoming overidentified with the emotion. While the associations to appraisal in Study 2 do not support this mechanism, further testing other outcomes of self-compassion, both positive and negative, is imperative to establish if response modulation is a possibility, and if so, how it functions.

5.1.2 Schemas.

Another potential mechanism by which self-compassion produces certain outcomes is through the cultivation of adaptive cognitive schemas. Emotional experience is often defined by emotion schemas (Izard, 2007, 2009). Schemas involve the role of higher order processes, and are connected to issues such as reflection and rumination that serve as triggers for emotional feelings and reactions to situations (Izard, 2007, 2009; Izard, Woodson, Finlon, Krauthamer-Ewing, Grossman, & Seidenfeld, 2011). Self-compassion may influence resultant reactions through higher order processes. The higher order processes and emotional feeling can play an important role in athlete functioning, as cognition is part of the emotional experience and is also involved in behavioural reactions (Izard, 2007, 2009; Izard et al., 2011; Uphill & Jones, 2012). However, Gilbert and Procter (2006) argued that compassionate mind training, which involves self-compassion, is more about changing perceptions and orientations related to the self, rather than developing a specific schema. Schemas can influence behavior and emotion, yet it is
possible to use self-compassion and mindfulness to work with existing schemas (Germer, 2009). Germer presents self-compassion as an agent for recognition and management of schemas, and not a cognitive schema per se. Recognition of schemas requires mindfulness and being kind to oneself and understanding of that schema - regardless of the state and direction - requires self-compassion (Germer, 2009). This would align with self-compassion as a reflective skill, similar to reappraisal. Alternatively though, if self-compassion prompts a shift in autonomic processing, schemas or initial appraisal (as discussed earlier in this section) could be the mechanism.

5.1.3 Concluding remarks on mechanisms.

Future research needs to establish the mechanisms connected to self-compassion through empirical testing. A limitation of the present research and literature is that the mechanisms underlying self-compassion are not yet clear. Thus, these mechanisms remain untested. A challenge for future research will be assessing underlying beliefs and appraisals to determine where – and how – changes are taking place. It could be that self-compassion creates an adaptive schema or influences attention, appraisal, or responses through emotion regulation. A starting point may be to determine if self-compassion skills prompt automatic or reflective shifts in processing. The mechanisms involved in the self-compassion intervention in Study 3 are likely connected to reflective processes, given the focus on writing and learning. Thus, cognitive restructuring, reappraisal, or the management of existing schemas are the most promising directions to explore with the present framework. Nonetheless, the present program of research was not directed towards, and thus was unable to provide, information on sources of influence or mechanisms of change. Future research needs to identify and systematically isolate potential mechanisms to further understanding in this area. Identifying the mechanisms underlying self-compassion will facilitate the development of the most effective interventions to help athletes
manage stressful demands that can vary in severity, specificity, context, as well as across different temporal stages of sport training and competition (see Hanin, 2010; Lazarus, 2000).

**5.1.3.1 Strategy and domain considerations.** Self-compassion has been positioned throughout this dissertation as a resource, and results from Study 3 provide evidence that self-compassion can indeed be fostered (and increased) among varsity women athletes. Another question closely related to mechanisms lies in how best to develop self-compassion. Certain elements of the self-compassion intervention may be more effective and/or essential than others. Future research will need to identify the most effective mode of intervention strategy to enhance self-compassion and reduce negative sport experiences. Gaining insight into which aspects of this self-compassion sport intervention are most important (psycho-educational, writing, or both), as well as if aspects of other self-compassion interventions (e.g., therapeutic guidance, imagery; Gilbert & Irons, 2004; Gilbert & Procter, 2006; Kelly et al., 2010) provide similar or additional benefit, will inform future facilitation of this method, tailoring approaches best suited to the target population. Furthermore, replication of the promising results from this doctoral research would help support the value of this intervention in women’s sport programs.

Though self-compassion appears to have merit in helping women athletes to manage negative issues in sport, research has yet to compare self-compassion approaches with more traditional mental skills training and coping skills programs. Other forms of writing interventions, such as written emotional disclosure (e.g., Mankad & Gordon, 2010) should be compared with self-compassionate writing to evaluate efficacy and feasibility in different domains. Written emotional disclosure surrounding injury experiences has shown beneficial effects (e.g., Mankad & Gordon, 2010), and future research should examine if a combination of self-compassion and emotional disclosure advances coping objectives. There are a variety of
mental skills that could be applied in the sport context. Conceptually, self-compassion appears to be effective in dealing with negative events in sport, as well as the accompanying self-criticism, concern over mistakes, and rumination that pose challenges for women athletes (Mosewich, Crocker, & Kowalski, 2013), but this strategy needs to be tested empirically against other approaches.

Effectiveness and appropriateness of the approach used to promote self-compassion is likely also influenced by the domain in which it is applied. Different approaches may be warranted in different areas, such as sport, academics, and body image. Self-compassion is also likely important during specific instances, such as when managing a negative event (Neff, 2003b, Mosewich, Crocker, Kowalski et al., 2013) and during adolescence (Neff, 2003b). Effectiveness and appropriateness may also be influenced by gender. The present program of research has focused specifically on women, and it is unknown whether the need for self-compassion, and ability to foster self-compassion, will be mirrored with male athletes. Self-compassion tends to be lower in women than men (Neff, 2003a, 2008; Neff et al., 2005; Neff & McGehee, 2010), and it is possible that self-compassion intervention would be less relevant to men. The most effective approach and design for a self-compassion intervention may also vary by gender. Another important consideration involves specifics associated with the target population. Women varsity athletes who self-identified as being self-critical in a way that is less than constructive were recruited for the self-compassion intervention in Study 3. Initial self-compassion levels have been suggested to influence intervention effectiveness (Leary et al., 2007); thus, the lower self-compassion suggested by the self-criticism suggested potential for improvement. It is unknown whether athletes falling into less self-critical categories would benefit in the same manner.
Taken together, when self-compassion is most useful and how best to apply it are important directions for future research.

5.2 Extension to Self-Regulation and Adherence

A possible asset in self-compassion intervention is the potential role of the construct in promoting adherence (Terry & Leary, 2011). If supported, associations between self-compassion and adherence hold implications for application in other areas, such as injury rehabilitation and program prescription. The rationale for the increase in adherence comes from the positive association between conscientiousness and self-compassion (Neff et al., 2006). Contentiousness increases medical adherence (Christensen & Smith, 1995); thus, an increase in self-compassion likely has accompanying increases in contentiousness and desire to care for oneself, and may bolster levels of adherence. Additionally, self-compassion could counter feelings such as shame, self-blame, anger, and non-acceptance that can interfere with self-regulation and subsequent adherence (Brion & Menke, 2008).

If self-compassion is positively associated with adherence, additional benefits and implications connected to self-compassion promotion arise. Such a relation will support consideration of the addition of elements of self-compassion to programming where adherence may be an issue. When people experience illness or injury or take part in any behavioural or cognitive program, the need to self-regulate and follow guidelines does not typically end with treatment. Adherence is important, and in the sport domain, this applies to healthy athletes adhering to a training regime, injured athletes following a rehabilitation plan, athletes taking part in psychological skills training programs, or in self-compassion programs like in Study 3 of this program of research. The addition of elements of self-compassion to such programs could foster better adherence. Injury in particular was identified by the athletes in Study 1 as a difficult issue
to manage (Mosewich, Crocker, & Kowalski, 2013). Many athletes reported struggling to follow training modifications made necessary because of injury. Self-compassion may not only help with coping with negative events such as an injury, but may also facilitate adherence to rehabilitation programs.

Self-compassion may also promote effective, adaptive decision making through self-regulation. Self-compassion indirectly effects self-regulation. Self-regulation is supported by emotion regulation, which self-compassion promotes (Neff et al., 2005). Self-compassion should allow people to take responsibility for their actions, but without rumination or self-blame (Terry & Leary, 2011). Given that “self-compassion should be linked to greater knowledge and clarity about one’s limitations” (Neff, 2003b, p. 93), self-compassion should also be an asset in self-awareness and goal-setting. All of these connections are assets to athletes whether negotiating and self-regulating during setbacks, success, or some experience in between. Future research should establish if such relations hold in the sport domain.

5.3 Knowledge Transfer

Another important element in intervention and application is to facilitate effective knowledge transfer. Gathering feedback from key stakeholders (e.g., athletes, coaches, sport governing body representatives and administrators) regarding the intervention process and the best way to integrate knowledge into practice is an important part of applied research (Bickman & Rog, 2009). If the self-compassion intervention continues to show promising results, this objective will focus on how to best facilitate successful knowledge transfer, helping to achieve Sport Canada’s vision outlined in the Canadian Sport Policy 2012 of promoting “enhanced education and skill development… [allowing athletes] to participate, compete and excel in sport, deriving personal pleasure and pride in their accomplishments, and skills that can be transferred
to other fields of practice” (p. 4), developing programming based on “sound science” (p. 11), and emphasizing partnerships in educational, administrative, and community sectors (Sport Canada, 2012). This focus will lead to tailored and appropriate strategies aimed at enhancing self-compassion and reducing negative sport experiences, cultivating positive sport environments and outcomes.

5.4 Promotion of the Positives: Not Merely an Avoidance of the Negatives

Much of the focus in sport involves reaching one’s potential, achieving goals, having positive experiences, and cultivating healthy, happy athletes. Such positive emphasis speaks to the importance of consideration of the fit of self-compassion within positive psychology. Positive psychology has the goal of not only developing qualities for survival and basic functioning, but also qualities that support human flourishing (Seligman, 2002). A key principle surrounding positive psychology is building strengths (Seligman, 2002). Self-compassion seems to be a possible avenue to cultivate human flourishing, and direct focus away from weakness or setbacks, and move forward towards bettering oneself.

While the present program of research was focused on dealing with many of the inherent negatives that accompany sport involvement, the three main elements of self-compassion have the potential to fuel positive emotion, adaptive resources, and possibly the fulfillment of potential. Conceptualized as being most useful in negative times (Neff, 2003b), much of the focus of self-compassion research has been on relations with negative constructs. The elevated attention to negative issues over the positive is not uncommon in psychology. Overall, negative emotions and experiences tend to garner more attention than the positive, especially when it comes to empirical research (Fredrickson, 2004). Many psychological theories and models are centered around the negative, and, if positive elements are added, they often are added later,
resulting in a less than optimal fitting model (Fredrickson, 2004). Negative emotions can produce issues, but cultivating positive change and emotions is worthwhile. Achievement striving in competitive sport requires successful change and positive adaptation (Hanin, 2010). There is some support outside of the sport context suggesting the elements of self-compassion may be relevant in more positive contexts, as self-compassion has been positively associated with life-satisfaction, well-being, social connectedness, emotional intelligence, mastery goals, happiness, optimism, positive affect, wisdom, personal initiative, curiosity and exploration, agreeableness, extroversion, and conscientiousness (Adams & Leary, 2007; Leary et al., 2007; Neff, 2003a; Neff et al., 2005; Neff & McGehee, 2010; Neff, Rude et al., 2007; Wei et al., 2011). Additionally, self-compassion was related to control appraisals in Study 2, highlighting a positive connection in the sport domain. Thus, the link to positive constructs has some support. Future research in self-compassion needs to determine if the construct can produce positive emotions and behaviours in sport, and also examine desirable outcomes, such as improved performance.

5.4.1 Self-compassion and the ‘Broaden-and-Build Theory of Positive Emotion’.

Neff (2011b) associates the positive elements of self-compassion to the broaden-and-build theory of positive emotion. The broaden-and-build theory of positive emotion suggests that positive emotions not only link to well-being, but contribute to it (Fredrickson, 2004). The experience of positive emotions leads an individual to “broaden momentary thought-action repertories” (p. 1369), meaning increasing the number of positive thoughts and actions (such as building attention capacity, as well as adaptive cognition and action), and “build their enduring personal resources” (p. 1369) including physical, intellectual, and social resources (Fredrickson, 2004). Importantly, the personal resources that are developed during states of positive emotion
are durable, and outlast the emotion that leads to their generation (Fredrickson, 2004). Self-compassion is thought to cultivate positive emotion (Neff, 2011b), connecting to the broaden-and-build theory. Presumably through approaching situations with self-kindness, common humanity, and mindfulness, and providing care and necessary attention to oneself, self-compassion is conceptualized to ‘broaden and build’. This process is an area that should be examined in sport settings as a way to increase positive affect and promote development of mental skills resources.

Experiencing increased positive emotion may help to counter the effects of negative emotion (Fredrickson, 2004), providing another mechanism by which self-compassion helps with emotion regulation. Negative emotions narrow options and resource development, while positive emotions expand and develop resources (Fredrickson, 2004); thus, there are clear implications for having athletes experience positive emotion when trying to get them to effectively regulate emotion. If self-compassion does increase positive emotion, it will add to the list of potential functions of this resource. However, further exploring the relation between self-compassion and positivity in terms of discrete emotion is necessary to help successfully evaluate the proposed broaden-and-build connection to self-compassion. While self-compassion is related to a variety of positive constructs, there are instances of null relations. For example, while Neff, Rude, and colleagues (2007) found a positive relation between self-compassion and positive affect, this result was not mirrored in Study 2 with women athletes. Thus, it is necessary to explore relations with more discrete emotions to help contextualize this relation further. Though self-compassion is situated in terms of three “positive” elements, it may be that self-compassion is more about the absence of negative emotion. Research in the exercise domain has suggested that self-compassion might act as a potential buffer against negative outcomes that
rely highly on self-evaluative processes (Magnus et al., 2010). Thus, high self-compassion may be more connected to lack of experiences of self-judgment, self-criticism, isolation, and overidentification or rumination.

5.4.2 Self-compassion and human potential.

As “positive emotions fuel human flourishing” (p. 1373), bettering emotional states, resources, and promoting flourishing and longevity (Fredrickson, 2004), self-compassion may be an agent in achieving human potential. While the link between self-compassion and human potential has not been extensively studied, there is some promising empirical evidence to date. Neff and colleagues (2005) found that individuals high in self-compassion set elevated standards for themselves. The key difference between those high and low in self-compassion was that those high in self-compassion were less hard on themselves and experienced less devastating negative affect if goals were not attained (Neff et al., 2005). A focus on mastery goals (Neff et al., 2005) also indicates an orientation towards personal growth. Self-compassionate individuals are also more likely to reinterpret failure on an exam as an opportunity for growth (Neff et al., 2005). More support comes from the positive relation between self-compassion and eudaimonic well-being in young women athletes and exercisers (L. J. Ferguson, Kowalski, Mack, & Sabiston, 2012). Eudaimonia is associated with striving for one’s potential (Ryff & Signer, 2008). Additionally, as increased self-compassion is associated with decreased fear of failure (Mosewich et al., 2011), a conceptual extension could be made for self-compassion leading to striving for potential and working towards goals. However, self-compassion was not related to the personal standards component of perfectionism in Study 2 (Mosewich, Kowalski et al., 2013), nor was it related to performance standards in work by Neff and colleagues (2005). Taken critically, however, it may be that self-compassionate people aim just as high, but are not
devastated if goals are not attained (Neff 2011a; Neff et al., 2005). Overall, the connection between positive outcomes and self-compassion needs to be more thoroughly explored as we seek to understand the role self-compassion could play in reaching human potential. The association between self-compassion and personal growth and striving for human potential is important in all domains as we consider the link to positive psychology, but will take a major focus for athletes aspiring to ever increasing levels of performance. The relation between self-compassion and achievement, well-being, and performance needs to be explored in greater detail. Conceptually, self-compassion should help athletes not only avoid negatives, but achieve positives. However, this notion needs to be tested empirically.

5.5 Self-Compassion: Is It All Positive?

Most emphasis, both empirically and conceptually, has been placed on the positives self-compassion can offer an individual. However, exploration into any potential maladaptive attributes of self-compassion is largely ignored in terms of empirical testing, and criticisms of the construct tend to be countered conceptually or by highlighting lack of relations to related concepts. Prior to widespread promotion of self-compassion, potential drawbacks should be more carefully considered. Additionally, as participants in a self-compassion intervention may fear that a lack of self-criticism will promote complacency, self-indulgence, or interfere with motivation or goal progress (Gilbert, 2009; Gilbert et al., 2011), an increased ability to confidently counter concerns is warranted. Such reservations surrounding a lack of self-criticism were an issue in the present program of study. Athletes in Study 1 perceived some level of self-criticism as necessary for success and goal progress in sport (Mosewich, Crocker, & Kowalski, 2013), and, in response, a case for why self-compassion does not promote passivity was part of the self-compassion intervention in Study 3 (Mosewich, Crocker, Kowalski et al., 2013). Thus,
further ascertaining positive and negative aspects of self-compassion is warranted not only to diminish concerns, but to also more thoroughly inform athletes of all associations with self-compassion, positive or negative. More rigorous empirical testing of the promotion of the positives, rather than merely avoidance of negatives, needs to be tested in both the sport domain and on a more general level. Though self-compassion is contended to not promote passivity (Neff, 2003b), an individual could attempt to use the quest for self-compassion as a crutch for lack of drive and motivation. In sport, an athlete could use the excuse of “being more self-compassionate” to attempt to justify, and avoid self-criticism over, lessened commitment or focus on training. Additionally, Neff, Kirkpatrick et al. (2007) suggested that there are times when it may be more useful to press on, rather than acknowledge one’s personal hardships and suffering (citing the example of the “stiff upper lip” during war times). In sport, such instances may present during difficult training sessions or competitions against frustrating opponents. Also, self-compassion may, at times, be a cover for less adaptive emotions. This is likely when self-awareness is in need of further development, as one does not see the situation completely. Neff, Kirkpatrick, and colleagues give the example of self-pity being fostered under the guise of self-compassion if the concept of common humanity is not adequately grasped. In sport, athletes may succumb to feelings of self-pity if they fail to recognize that other athletes likely have experienced (and successfully negotiated) similar issues. Passivity or laziness may also result if concurrent steps are not taken to ensure health and well-being (Neff, Kirkpatrick et al., 2007), and, in sport, this could also include fulfillment of performance potential. Thus, all components of self-compassion must be present for the construct to exist and promote the adaptive elements to which it is purposed. Future research needs to carefully examine not only the benefits of self-compassion, but the potential drawbacks of the construct as well. Weighing positives against
negatives can help in the decision of whether it might be worthwhile to promote self-compassion in an individual.

5.6 Approach to Program of Research

This dissertation program of research took a mixed methods approach and utilized important characteristics of mixed methods research outlined by Creswell and Plano Clark (2011). The present body of research incorporated both qualitative (Study 1) and quantitative (Study 2 and Study 3) approaches to data collection, analysis, and interpretation, but all originated from a shared epistemological stance - pragmatism. Though no single study in the present program of research incorporated mixed methods, globally, the program is connected, and capitalized on the approach. The mixed methods approach allowed for capitalization on the strengths of both qualitative and quantitative methods, and an increased ability to incorporate a research design driven by the research question (Creswell & Plano Clark, 2011), helping to better understand the role of self-compassion as a resource in sport. The latter includes research questions driving the collection and detailed analysis of both quantitative and qualitative data and both types of data being given equal consideration and importance (Creswell & Plano Clark, 2011).

5.6.1 Epistemology.

In approaching research questions surrounding self-compassion, research orientation is as important as the methodology (Tashakkori & Teddlie, 1998, 2003) and a potential challenge of mixed methods research is to keep assumptions clear throughout the process, thus acknowledgement of worldviews and orientations is imperative (Creswell & Plano Clark, 2011). The present dissertation program of research was driven by pragmatism. A solution to a problem is sought (Patton, 1990) – understanding the role of self-compassion in sport with the larger aim
of helping women athletes better manage stress. As the problem is seen as the focus, approaches to answer or solve the problem are pursued using multiple means of deriving knowledge and understanding (Patton, 1990; Tashakkori & Teddlie, 1998). The pragmatic approach focuses on using methods that will provide the researcher with the best opportunity to answer the research question, and this includes utilizing a combination of approaches when appropriate (Creswell & Plano Clark, 2011; R. B. Johnson & Onwuegbuzie, 2004). The present program of research embraced such an approach – a phenomenological orientation helped to explore athletes’ experiences with setbacks in sport; a prospective quantitative design helped to examine the relation between self-compassion and the stress and coping process, as well as with perfectionism; and a randomized control trial made it possible to evaluate the effectiveness of a self-compassion intervention among women athletes.

5.6.2 Pragmatism and mixed methods research.

Pragmatism emphasizes the outcome and practicality of methods of inquiry and thus the focus is on the research question, unconstrained by philosophical worldview (Creswell & Plano Clark, 2011; R. B. Johnson & Onwuegbuzie, 2004). Pragmatism allows for quantitative and qualitative paradigms to coexist philosophically and methodologically in a single study (R. B. Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003) and provides epistemological justification for mixing methods (R. B. Johnson, Onwuegbuzie, & Turner, 2007). Research taking a pragmatic stance is based on intended consequences or the purpose and path it is desired to inform (Creswell, 2003). Thus, each study not only provided knowledge regarding the issue at hand, it informed future steps and studies in the dissertation. The mixed methods approach to this dissertation served a developmental purpose, with one set of data building on and informing the next (Creswell & Plano Clark, 2011). Study 1 explored varsity women athletes’ experiences
with setbacks through a phenomenological orientation. Decisions surrounding approach and method (i.e., phenomenological lens, semi-structured interviews, thematic analysis) were made to maximize effectiveness of answering the research question. The desire to better understand the unique challenges faced by varsity women athletes lent well to providing a voice for the athletes to identify issues relevant to them, broadening our current understanding. Study 1 not only aided in understanding the experiences of setbacks in sport, but also identified issues, namely rumination and self-criticism in pursuit of perfection, that could be better managed, possibly with self-compassion. Study 2 built upon this route, empirically examining the link between self-compassion and the stress and coping process, as well as looking more specifically at perfectionism. Issues from Study 1 directed Study 2, where again, research question drove methodology. This pattern continued to the final study, where collective findings directed approach for the intervention. Study 3 attempted to embrace the potential of self-compassion, targeting issues identified in Study 1 (self-criticism and rumination) and Study 2 (concern over mistakes). Thus, methods were combined in such a way that dictated the research process (Creswell & Plano Clark, 2011) and work towards a solution to problems identified by women athletes.

5.6.3 Advantages of mixed methods research.

Combining quantitative and qualitative methodologies offers several advantages, including the use of both qualitative and quantitative approaches to provide a more complete understanding of the issue in question (Bazeley, 1999; Creswell & Plano Clark, 2011). Study 1 was able to integrate strengths associated with the qualitative approach that include honouring participants’ own perceptions and meanings of setbacks in sport, allowing the researcher to gain insight into how participants understand and describe their personal experiences with the
phenomenon, as well as providing the flexibility to capture the issues at hand (R. B. Johnson & Onwuegbuzie, 2004). The quantitative approach employed in Study 2 and Study 3 provided the ability to test conceptual ideas (R. B. Johnson & Onwuegbuzie, 2004), including the links between self-compassion and perfectionism, and the role of self-compassion in the stress and coping process in Study 2, as well as control confounding variables and establish causal relationships in Study 3. Both qualitative and quantitative approaches offer unique information; what is imperative is that the choice be justified. Given the overall aim of the research - wanting to better understand the role of self-compassion in a sport context, particularly among women athletes dealing with challenging events - approaches were chosen as to best answer the question at hand and inform the next step.

5.6.4 Criticisms and challenges of mixed methods approaches.

Though a mixed methods framework has many advantages, such an approach has also been the target of criticism. One challenge is the need for knowledge and training in both qualitative and quantitative research design and analysis (Creswell & Plano Clark, 2011). Direction from committee members and other experts in the field played a key role in increasing the quality of each study through feedback and guidance. Another key concern over combining qualitative and quantitative methods lies with the conflict of their underlying philosophical assumptions (Morgan, 1998). However, given the pragmatic orientation of the current study, there is less of an epistemological struggle. Additionally, R. B. Johnson and Onwuegbuzie (2004) highlighted similarities in quantitative and qualitative research that are also present in the present program of research. One commonality is that both employ empirical observations to address research questions. Though the type of observation differed across studies, the aim to understand the experiences of women athletes remained a foundational element, as did
understanding the role of self-compassion in sport. Another similarity presents in the goal of sound research design and quality. This program of research, regardless of its qualitative or quantitative background, sought to limit bias and invalidity, as well as promote trustworthiness. Thus, qualitative and quantitative research share more underlying goals and assumptions than often realized (R. B. Johnson & Onwuegbuzie, 2004).

5.7 Concluding Remarks

The present program of research has advanced understanding of self-compassion in a sport context. The utilization of mixed methods provided research approaches that allowed for athlete voices to be heard and support the need for self-compassion, for important conceptual links between self-compassion and the stress and coping process in sport to be empirically tested, and a randomized control trial to be successfully facilitated. This program of research was sequential, with each study not only making important unique contributions, but also informing subsequent studies in the research program. A strong case can be made for exploration and application of self-compassion in sport, and a foundation for direction for application and future research has been outlined.

Despite the strengths and contributions of this program of research, there are inherent limitations. First, as outlined earlier in this chapter, future research needs to establish, and empirically test, the mechanisms connected to self-compassion. A limitation of the present research is that the mechanisms underlying self-compassion are not clear and remain untested. Another limitation of the program of research as a whole is the inability to comment on the relation between self-compassion and different coping strategies. Study 2 focused on coping function, and Study 1 and 3 had no formal focus on specific coping strategies. Also, while the present program of research provides insight into self-compassion among women athletes, the
ability to generalize to other populations, such as male athletes, adolescent athletes, or a non-athlete sample, is limited. Additionally, insight into the influence of variables such as level of sport participation or team versus individual sport also remain unknown. However, the present program of research provides a solid platform from which to build and the limitations provide direction for future research endeavours.

Competitive sport creates multiple demands on athletes across contexts and time, producing a variety of physical, cognitive, and emotional experiences associated with the many opportunities of potential threat, loss, and gain (Hanin, 2010; Lazarus, 2000; Uphill & Jones, 2012). The present dissertation program of research demonstrated that self-compassion is an important construct to investigate in the sport domain, particularly in managing negative events that typically present difficulties in coping among women athletes. The support for the effectiveness of self-compassion as a resource to assist athletes in successful adaptation provides justification for further investigation in pursuit of healthy and successful sport experiences.
References


Appendix A: Consent Form for Study 1

Sport and Exercise Psychology Lab
School of Human Kinetics

Dealing with Success and Setbacks in Sport: An Exploration of Effective Coping Processes with Women Athletes

CONSENT FORM

Peter Crocker, PhD (Principal Investigator)  Amber Mosewich, MSc
School of Human Kinetics  School of Human Kinetics
University of British Columbia  University of British Columbia
Contact Number: [redacted]  Contact Number: [redacted]
pcrocker@interchange.ubc.ca  mosewich@interchange.ubc.ca

Purpose of the Project:

You are invited to take part in a research study entitled: “Dealing with success and setbacks in sport: An exploration of effective coping processes with women athletes”. Setbacks and perceived failures occur at every level of sport competition, which can be stressful. Success, although positive, can also present new issues to deal with. Research has linked the ability to deal with stresses that arise in sport to emotions and performance. Therefore, it is important that athletes develop effective coping skills to deal with stressful situations in sport, including both success and setbacks. The purpose of this research is to explore how university women athletes (ages 18-35) deal with success and failure in sport.

Participation:

If you agree to participate you will be invited to take part in a one-on-one interview. The location for this interview will be at a place that is convenient to you (e.g., UBC campus) and will last approximately 1 to 1.5 hours. If there are issues you do not wish to talk about, you do not have to talk about them and you will not be pressured to talk about that issue by the interviewer. Also, if you wish to withdraw from the study, you may do so at any time without having to give any reason for doing so. Withdrawing from the study will not result in any negative consequences for you. The interview will be tape-recorded and
transcribed (written out word for word) in order to analyze the information you provide. You will have the opportunity to look over the transcript (typed copy of the interview) and change, add, or delete any comments as you see fit. If you chose to look over your transcript, this meeting will last approximately 30 minutes.

**Potential Risks:**
This study will not subject you to any physical risk. You can refuse to answer any question during the interview and doing so will result in no penalty to you or anyone else. Although we do not expect any psychological risk, if we feel participation is placing you under undo stress we will discontinue your involvement in the study, again resulting in no penalty. Any data collected prior to this point will be omitted from the study and destroyed. In the event that you would like to further discuss your feelings regarding the topics discussed in the interviews, UBC Counselling Services (604-822-3811) or Student Health (604-822-7889) can be of assistance.

**Potential Benefits:**
There are no guaranteed benefits if you agree to participate in this study.

Although no benefits of participation in the study can be guaranteed, there is the potential for participation to help increase understanding about how women athletes deal with success and setbacks in sport. Understanding how to best deal with success and setbacks could help women athletes in their sport endeavours by highlighting the skills needed to cope effectively in sport. This is a step towards promoting the most positive sport experiences for women athletes possible.

If you would like to know about the results of the study, feel free to contact Amber Mosewich (mosewich@interchange.ubc.ca or (604) 220-5375). A summary of the results and copies of any resulting publications will be provided.

**Confidentiality:**
The researchers will strive to keep any information you provide within this interview anonymous. Personal information that can identify you such as college and real name will be removed from any reports that may result from this research. You will be identified by a pseudonym (a fake name) in the transcripts and the consent form with your name on it will be stored separately from your transcript. However, although all identifying information will be removed, there is still a chance that you could be identified based on what you have said. If you feel uncomfortable with any part of the discussion, you can indicate to the interviewer that you do not want that part of the discussion included in the data.
to be analyzed. You also have the chance to review your transcript and make any changes to the document at that time.

Your confidentiality will upheld to the highest regard possible. We will make sure that audio-recordings are not overheard and that transcripts are not read by anyone other than the researchers involved with this study. All interview transcripts will be kept in a locked cabinet in the office of the principal investigator and no one other than the researchers associated with this study will have access to this information. It is important that you are aware that there are certain types of information that the researcher may be obliged to report to relevant authorities if it comes up during the interview (e.g., child or elder abuse, intent to do harm to oneself or others).

Contact Information about the Study:

Your participation in this research is entirely voluntary and you may withdraw from the study at any time without having to give any reason for doing so and without experiencing any negative consequences. If you have any questions or want further information about the study please contact Dr. Peter Crocker and/or Amber Mosewich at the contact information provided at the beginning of this form.

Contact for Concerns about the Rights of Research Subjects:

If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598 or if long distance e-mail to RSI@ors.ubc.ca.

Consent:

I consent to take part in this study of ‘Dealing with success and setbacks in sport: An exploration of effective coping processes with women athletes’. The study has been explained to me and I understand what is involved.

I understand that my participation in this study is entirely voluntary and that I may withdraw from the study without having to give any reason for doing so and without experiencing any negative consequences. I understand that if I do not wish to answer any question or discuss any topic that is raised, I may refuse to answer and the interviewer will go onto the next question. If I withdraw from the study, the information I have supplied (tapes, notes) will be destroyed.
I am willing to take part in the interview and understand that this will last approximately 1 to 1.5 hours, and I am happy for the conversations to be tape-recorded.

I understand that quotations from my interview may be used in publications to support conclusions.

I have received a copy of this consent form for my own records. I also understand that any identifying characteristics will be removed from the information I supply so that my anonymity is protected.

By signing this form you have consented to participate in this study.

Name of Participant (printed): _______________________________________________

Signature of Participant: ____________________________________________________

Date: ______________________________________________________________________
Appendix B: Semi-Structured Interview Guide for Study 1

- Go over consent form
- Explain any sections that may be unclear. Discuss the limits to confidentiality as outlined in the consent form.
- Explain what the discussion will center around today (talking about success and setbacks in sport and the different ways success and setbacks are dealt with)
- Reminder that the participant can withdraw at anytime without penalty
- Do not have to answer any questions that you are not comfortable with
- Ask if the participant has any questions before the interview begins

1. Tell me a bit about yourself. (This section is designed to be an icebreaker)
   a. Tell me about some of your past experiences in sport.
      i. What sports have you participated in?
      ii. Describe your sport involvement.
      iii. When did you start?
      iv. How did you choose to participate in sport?
      v. At what levels have you competed?

2. What do you think are the most difficult failures or setbacks in your sport?
   a. What is it about these experiences that make them so difficult?

3. What are some failures or setbacks that you have experienced? Think about a recent setback that you have gone through. Describe the experience if you can.
   a. Where did these pressures come from?
   b. How did you feel, what did you think?

4. What did you do to deal with these experiences?
   a. What was effective?
   b. What was ineffective?

5. Now that we have talked a bit about setback and success experiences, I am going to ask you some more questions about different things that you might have done during the setbacks.

6. Were there any times where you were really critical of yourself? Did you ever attempt to avoid being really hard on yourself and really critical? Do you ever try to be kind and understanding towards flaws/inadequacies/things you do not like?
   a. Do you think other athletes use this approach?
   b. Do you think this might be effective?
c. Have you ever had anyone tell you to be understanding and less critical of yourself? How did you take it? What did you think?

7. Do you ever try to look at the setback experience objectively? In other words, do you look at the situation in a neutral and non-judgmental way, recognize how you feel and attempt to deal with it, without trying to deny how you truly feel? To you try to keep things in balance or in perspective and avoid obsessing or fixating?
   a. Do you think other athletes use this approach?
   b. Do you think this might be effective?
   c. Has anyone ever tried to get you to try to keep things in perspective? How did you take it? What did you think?

8. When you experience setbacks, do you usually point out to yourself that others probably have to deal with similar issues? Or do you feel alone in your failures?
   a. Do you think other athletes use this approach?
   b. Do you think this might be effective?
   c. Has someone ever tried to point out that others might be going through a similar thing? How did you take it?

9. What skills have you developed throughout your time as an athlete that has helped you deal with setbacks?
   a. Where do you think you picked up these skills?
   b. What else do you think you could benefit from doing to help you deal with setbacks in sport?

10. Can you think of anything else that other athletes do that seems effective?
    a. Ineffective?

11. Now let’s focus on success. Think of a time when you were experiencing success. Were there any new issues that you needed to deal with? What were they? Where did these pressures come from?
    a. How did you deal with them?
    b. Do you think you dealt with them in the best possible way? If not, what might you do differently that you think might be effective?
    c. What have you seen other athletes do?

---

12 This study was part of a more broad research focus that also included exploration of athletes’ experiences with success, and accompanying coping efforts. As the focus of this dissertation centers around self-compassion as a resource for dealing with negative issues in sport, the topic of success was tangential to the scope of the dissertation, and thus is not presented in Chapter 2.
12. Is there anything else you’d like to say? Do you have any other comments? (Provide an opportunity for participants to make additional comments.)

- Thank the athlete for participating. Explain again that she will have the opportunity to member-check her transcript if she so desires.

- Ask if she has any questions. Remind her about the contact information on the consent form if any questions arise at a later date.
Appendix C: Demographics Questionnaire for Study 2

Section 1. Personal Information

1. What is your gender (check one)?  □ Male  □ Female

2. How old are you? ________ years

3. Sport
   a) What university sport are you competing in? ______________________
   b) Year of eligibility?  1  2  3  4  5

4. Based on these categories from the Canadian Census, how do you describe yourself?
   PLEASE CHECK ALL THAT APPLY:

   □ White/Caucasian  □ South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)
   □ Chinese  □ South East Asian (e.g., Cambodian, Indonesian, Vietnamese)
   □ Japanese  □ Black (e.g., African, Haitian, Jamaican, Somali)
   □ Korean  □ West Asian/Middle East (e.g., Afgani, Arab, Iranian)
   □ Aboriginal/First Nation (e.g., North American Indian, Metis, Inuit)  □ Other ethnic/cultural group, please specify:

5. What is your first language?

   □ English  □ Cantonese  □ French  □ Mandarin
   □ Punjabi  □ German  □ Spanish  □ Korean  □ Other _______________(identify)

6. Email address. __________________________________________

   Time 1: (required to contact you for the second time point)
   Time 2: (required so that this questionnaire can be linked to your first questionnaire)
Appendix D: Self-Compassion Scale (SCS) for Study 2 and Study 3

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never 1 2 3 4 5
Almost always

1. I’m disapproving and judgmental about my own flaws and inadequacies.
2. When I’m feeling down I tend to obsess and fixate on everything that’s wrong.
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
5. I try to be loving towards myself when I’m feeling emotional pain.
6. When I fail at something important to me I become consumed by feelings of inadequacy.
7. When I’m down and out, I remind myself that there are lots of other people in the world feeling like I am.
8. When times are really difficult, I tend to be tough on myself.
9. When something upsets me I try to keep my emotions in balance.
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
11. I’m intolerant and impatient towards those aspects of my personality I don't like.
12. When I’m going through a very hard time, I give myself the caring and tenderness I need.
13. When I’m feeling down, I tend to feel like most other people are probably happier than I am.
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

14. When something painful happens I try to take a balanced view of the situation.
15. I try to see my failings as part of the human condition.
16. When I see aspects of myself that I don’t like, I get down on myself.
17. When I fail at something important to me I try to keep things in perspective.
18. When I’m really struggling, I tend to feel like other people must be having an easier time of it.
19. I’m kind to myself when I’m experiencing suffering.
20. When something upsets me I get carried away with my feelings.
21. I can be a bit cold-hearted towards myself when I’m experiencing suffering.
22. When I’m feeling down I try to approach my feelings with curiosity and openness.
23. I’m tolerant of my own flaws and inadequacies.
24. When something painful happens I tend to blow the incident out of proportion.
25. When I fail at something that’s important to me, I tend to feel alone in my failure.
26. I try to be understanding and patient towards those aspects of my personality I don't like.
Appendix E: Sport Multidimensional Perfectionism Scale-2 (SMPS-2) for Study 2

Competitive Orientations Scale (Sport-MPS-2)

INSTRUCTIONS The purpose of this questionnaire is to identify how players view certain aspects of their competitive experiences in sport. Please help us to more fully understand how players view a variety of their competitive experiences by indicating the extent to which you agree or disagree with the following statements. (Circle one response option to the right of each statement). Some of the questions relate to your sport experiences in general, while others relate specifically to experiences on the team that you have most recently played with. There are no right or wrong answers so please don’t spend too much time on any one statement; simply choose the answer that best describes how you view each statement.

<table>
<thead>
<tr>
<th>To what extent do you agree or disagree with the following statements?</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If I do not set the highest standards for myself in my sport, I am likely to end up a second-rate player.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Even if I fail slightly in competition, for me, it is as bad as being a complete failure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I usually feel uncertain as to whether or not my training effectively prepares me for competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My parents set very high standards for me in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. On the day of competition I have a routine that I try to follow.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I feel like my coach criticizes me for doing things less than perfectly in competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. In competition, I never feel like I can quite meet my parents’ expectations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I hate being less than the best at things in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I have and follow a pre-competitive routine.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. If I fail in competition, I feel like a failure as a person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Only outstanding performance during competition is good enough in my family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I usually feel unsure about the adequacy of my pre-competition practices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Only outstanding performance in competition is good enough for my coach.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I rarely feel that my training fully prepares me for competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. My parents have always had higher expectations for my future in sport than I have.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. The fewer mistakes I make in competition, the more people will like me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please complete the remaining items in this questionnaire on the next page.
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. It is important to me that I be thoroughly competent in everything I do in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. I follow pre-planned steps to prepare myself for competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I feel like I am criticized by my parents for doing things less than perfectly in competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Prior to competition, I rarely feel satisfied with my training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. I think I expect higher performance and greater results in my daily sport-training than most players.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. I feel like I can never quite live up to my coach's standards.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. I feel that other players generally accept lower standards for themselves in sport than I do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. I should be upset if I make a mistake in competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. In competition, I never feel like I can quite live up to my parents' standards.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. My coach sets very high standards for me in competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. I follow a routine to get myself into a good mindset going into competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. If a team-mate or opponent (who plays a similar position to me) plays better than me during competition, then I feel like I failed to some degree.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. My parents expect excellence from me in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. My coach expects excellence from me at all times: both in training and competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. I rarely feel that I have trained enough in preparation for a competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32. If I do not do well all the time in competition, I feel that people will not respect me as an athlete.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33. I have extremely high goals for myself in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34. I develop plans that dictate how I want to perform during competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35. I feel like my coach never tries to fully understand the mistakes I sometimes make.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>---------------------------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>36. I set higher achievement goals than most athletes who play my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37. I usually have trouble deciding when I have practiced enough heading into a competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38. I feel like my parents never try to fully understand the mistakes I make in competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39. People will probably think less of me if I make mistakes in competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40. My parents want me to be better than all other players who play my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>41. I set plans that highlight the strategies I want to use when I compete.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>42. If I play well but only make one obvious mistake in the entire game, I still feel disappointed with my performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix F: Coping Function Questionnaire (CFQ) for Study 2

Coping

This instrument has a number of statements about thoughts or actions you might have used during the competition. Indicate how much you used each of the strategies during the actual competition.

For each statement use the following scale:

1: Not at all
2: A little
3: Somewhat
4: Quite a bit
5: Very much

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>Somewhat</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I tried to find a way to change the competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. I stayed in the competition and try to control my emotions to better deal with it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. I worked harder to try to change the competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I tried to change how I was thinking about the competition, so it didn’t seem as stressful to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. I tried to get out of the competition as soon as I could to reduce the stress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I used strategies to change the competition in order to deal with the stress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I tried to view the competition in a way that made it seem less stressful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. I tried to leave or avoid the competition to get away from the problem or to reduce the stress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. I did my best to change the competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. I tried to use different strategies that would help me control my emotions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. I looked for ways to solve the problem / challenge or to change the competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. I tried to get out of the competition and away from the stress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. I stayed in the competition and try to change it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. I worked through my emotions in order to feel better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. I tried to get away from the competition to reduce the stress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. I tried to find ways to control my emotions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. I tried to relax so that I could keep my emotions under control.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. In order to reduce the stress I tried to remove myself from the competition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix G: Goal Progress Scale for Study 2

**Goal Progress**

This scale consists of a number of statements about your athletic goals. Read each item and then circle the appropriate answer next to that statement.

Based on the *recent competition*, please circle the number that represents the extent to which:

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Not at all</th>
<th>Very Very Slightly</th>
<th>Very Slightly</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Strongly</th>
<th>Very Strongly</th>
<th>Very Very Strongly</th>
<th>Totally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1…you progressed towards your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2…you moved forward in pursuit of your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>3…you came closer to reaching your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>4…you felt frustrated about reaching your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>5…you made progress towards the realization of your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>6…you advanced towards your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>7…you reached your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>8…you failed to make any progress towards your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>9…you attained your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10…you accomplished your athletic goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

---

Note that this measure contains both goal progress and goal attainment items. Items 1, 2, 3, 5, and 6 were used in Study 2 to assess goal progress.
Appendix H: Cognitive Appraisal Measure for Study 2

Stress Appraisal Measure

Respond to each of these questions with respect to how you thought and felt during the competition you encountered.\(^{14}\)

Please use the following scale for each question:
1: not at all true
2: slightly true
3: moderately true
4: very true
5: extremely true

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I felt I had the ability to overcome this stressful competition.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. I believed I could positively attack this stressful competition.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. I believed I had what it took to beat this stressful competition.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. I was eager to tackle this challenge.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. I believed I could become stronger after experiencing this stressful competition.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. I believed I had the skills necessary to overcome this stressful competition.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. I was excited about the potential outcome of this stressful competition.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. I perceived this stressful competition as threatening.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. I felt totally helpless in this competition situation.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. I felt anxious in this competition.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. I believed this stressful event would impacted me greatly.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12. I believed this stressful competition was beyond my control.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

\(^{14}\) Note that the following items were used for Study 2: Threat = items 8, 10, and 11; Challenge = items 4, 5, and 7; Control = items 1, 3, and 6.
Appendix I: Positive and Negative Affect Scale (PANAS) for Study 2

Feelings and emotions

This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent you have felt this way during the competition.

<table>
<thead>
<tr>
<th>Item</th>
<th>Very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interested</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Distressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Excited</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Strong</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Guilty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Scared</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Hostile</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Enthusiastic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Proud</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Irritable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Alert</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Ashamed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Inspired</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Nervous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Determined</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Attentive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Jittery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Active</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Afraid</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix J: Consent Form for Study 2

School of Human Kinetics

Participant Consent Form

Coping with stress in competitive sport.

Peter Crocker, Ph.D. (Principal Investigator)
School of Human Kinetics
University of British Columbia
Contact number: [Redacted]
pcrocker@interchange.ubc.ca

Amber Mosewich, MSc
School of Human Kinetics
University of British Columbia
Contact number: [Redacted]
mosewich@interchange.ubc.ca

Purpose of study:
With funding support from a Social Sciences and Humanities Research Council of Canada Grant, we are conducting a study to examine how specific personality factors influence how athletes evaluate and cope with stressful competitive experiences. We are asking for your participation in this research so that we can better understand how perfectionism and gender impact the stress process in competitive athletes. This understanding will help in the development of psychological skills training programs for athletes as well as assist in future research that examines stress, personality, and gender. Results from this study will be presented at scientific conferences and will be published in academic journals.

Study Procedures:
- The study involves two separate assessments. In the first assessment, you will be asked to complete a questionnaire. The second assessment involves completing a second questionnaire using the internet.
- The first questionnaire will take approximately 15-20 minutes to complete, and will require you to complete measures of various aspects of perfectionism along with some general demographic information. We will also require some personal identifiers and an email contact.
- Approximately 4 weeks after the first assessment, you will be contacted by email and asked to identify an upcoming important competition that you perceive will be challenging. Within one day of the event completion, you will be asked to complete an online questionnaire related to how you evaluated the situation, how you coped, whether you attained or progressed towards your athletic goals, and your emotional state during the competition. This will take approximately 20-40 minutes to complete.
**Risks to Participants:**
- There are no foreseeable risks associated with your involvement in this study. You may experience some discomfort when recalling the stressful competitive event for the second assessment. You can discontinue your involvement in the study at any time, again resulting in no penalty. In the event that you would like to further discuss your feelings that arise from participating in this study, UBC Counselling Services (604-822-3811) or Student Health (604-822-7889) can be of assistance.

**Benefits to Participants**
- You will receive a $10.00 stipend after returning the first completed questionnaire to the researchers. You will be provided with a summary report of the findings from this study upon request. There is the potential for participation to help increase understanding about how competitive athletes deal with competition stress. This is a step towards promoting the most positive sport experiences for athletes possible.

**Confidentiality:**
Information gathered on the questionnaire will be used for research purposes only, and the identity of individual participants will only be known to members of the research team. Once both questionnaires are completed, they will be identified by code number only and will be securely stored for a minimum of five years as required by the University of British Columbia guidelines.
- Results of this study will be analyzed in group form and will be used in the preparation of a presentation and an academic research publication, all of which are public documents. A summary of the results will be available upon request.
- You do not waive any legal rights by reading or agreeing to consent to participate in this study.
- You are free to withdraw from this study at any time with absolutely no penalty. The decision to withdraw will NOT result in any loss of services or any other negative consequences.

**Contact information about the rights of research subjects:**
If you have any concerns about the treatment or rights of research participants, you may contact the Research Subject Information Line at 604-822-8598.

**Contact information about the study:**
If you have any questions concerning the procedures of this study or desire further information please contact Dr. Peter Crocker at 604-822-5580.

**Consent:**
- By returning the first completed questionnaire you are consenting to participate in this study. Please keep a copy of this consent form for your records.
Appendix K: Consent Form for Study 3

SELF-COMPASSION IN SPORT: AN INVESTIGATION OF THE POTENTIAL ROLE IN COPING

CONSENT FORM

Peter Crocker, PhD
School of Kinesiology
University of British Columbia
Contact Number: [REDACTED]
pcrocker@interchange.ubc.ca

Amber Mosewich, MSc
School of Kinesiology
University of British Columbia
Contact Number: [REDACTED]
mmosewich@interchange.ubc.ca

Purpose of the Project:

You are invited to take part in a research study entitled: “SELF-COMPASSION IN SPORT: AN INVESTIGATION OF THE POTENTIAL ROLE IN COPING”. Sport can be both challenging and exciting, and sometimes brings about difficult events or stressors. It is important from both a performance and enjoyment standpoint that athletes have the skills and resources necessary to deal with negative events that arise in sport. There are a variety of different ways to cope, but one relatively new approach is through self-compassion, which involves being kind and understanding towards oneself, rather than harshly self-critical, in difficult times (Neff, 2003). To better ascertain the potential behind self-compassion as a resource in sport, it must be established if the construct can be promoted in this context. The purpose of this research is to evaluate the effectiveness of a self-compassion intervention among women varsity athletes.

Participation:

For this study, we are looking for athletes who feel their self-criticism is less than constructive. Many people experience self-criticism and negative moods during challenging experiences; however, if you feel your self-criticism or mood gets in the way of your daily functioning or day-to-day life, please let the researcher know, as there may be other intervention options better suited for you and if this is the case, you will be directed towards these resources.
Interested athletes who meet the criteria will be invited to take part in an intervention. You will be randomly assigned to one of two groups: self-compassion group and an extended group. Both groups will take part in writing tasks over the course of one week. Athletes will meet in a group setting to be given a short presentation and instructions on the writing task. Athletes will also be asked to complete a questionnaire. Athletes will complete writing tasks on five separate occasions over the course of one week, on their own time. One week following the intervention, athletes will be asked to complete an online questionnaire. An additional questionnaire will be administered one month later and will also be completed online. Following this, athletes assigned to the extended treatment will be given the opportunity to participate in the self-compassion writing treatment.

The presentation and instruction session is expected to take approximately 2 hours. Completion of the online questionnaires will take approximately 15-25 minutes each. The writing exercises will take approximately 10 minutes each.

You will keep a diary/journal as part of this study. However, this journal will only be seen by you. The research team will NOT be collecting or reading journal entries.

If there are issues or events that you do not wish to talk or write about, you do not have to talk or write about them and you will not be pressured to pursue those issues by the researcher. Also, if you wish to withdraw from the study, you may do so at any time without having to give any reason for doing so. Withdrawing from the study will not result in any negative consequences for you.

**Potential Risks:**

This study will not subject you to any physical risk. You can refuse to answer any questions in the questionnaire package and/or withdraw from the study at any time and doing so will result in no penalty to you or anyone else. Although we do not expect any psychological risk, if we feel participation is placing you under undue stress we will discontinue your involvement in the study and direct you to appropriate resources, again resulting in no penalty. Any data collected prior to this point will be omitted from the study and destroyed. In the event that you would like to further discuss your feelings regarding the topics discussed in the study, your student health / counselling services can be of assistance (UBC: UBC Counselling Services: [☎️]; UBC Student Health: [☎️]; University of Saskatchewan: [☎️]; University of Regina: [☎️]).

**Potential Benefits:**

There are no explicit or guaranteed benefits to taking part in this study. However, there is the potential for participation to enable the development for an increased understanding about coping with negative events in sport and the
potential usefulness of self-compassion as a resource in dealing with setbacks. While it is hoped that this intervention will be helpful in increasing self-compassion and decreasing self-criticism, rumination, and concern over mistakes, these benefits cannot be guaranteed.

Participating athletes will receive $5 for completing the initial group session (questionnaire, presentation, and instruction), and receive a ballot entry to win one of five $50 gift cards to amazon.ca for each online questionnaire completed.

If you would like to know about the results of the study, feel free to contact Amber Mosewich (mosewich@interchange.ubc.ca or (604) 220-5375). A summary of the results and copies of any resulting publications will be provided upon request.

Confidentiality:

Information gathered on the questionnaires will be used for research purposes only and athletes will not be matched to individual responses. Once questionnaires are completed, they will be identified by code number only and will be securely stored for a minimum of five years as required by the University of British Columbia guidelines.

Results of this study will be analyzed in group form and will be used in the presentation of academic presentations and publications, all of which are public documents.

You do not waive any legal rights by consenting to participate in this study.

Your journal will NOT be collected or read by the research team.

Contact Information about the Study:

Your participation in this research is entirely voluntary and you may withdraw from the study at any time without having to give any reason for doing so and without experiencing any negative consequences. If you have any questions or want further information about the study please contact Dr. Peter Crocker and/or Amber Mosewich at the contact information provided at the beginning of this form.

Contact for Concerns about the Rights of Research Subjects:

If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at or if long distance e-mail to @ors.ubc.ca.
Consent:

By returning the first completed questionnaire and signing this form, you are consenting to participate in this study. Please keep a copy of this consent form for your records.

__________________________________  ________________________
Name (printed)                               Researcher signature

__________________________________  ________________________
Signature                                               Date

_______________________________________  ________________________
Date

181
Appendix L: Demographics Questionnaire for Study 3

1. **Sport Information**
   a) What university sport are you competing in? ___________________

   b) Year of eligibility (please circle one): 1 2 3 4 5

   c) Have you been a member of the National Team?  
      [ ] Yes  
      [ ] No

2. **How would you describe yourself? You can mark more than one, or specify, if applicable.**

   [ ] White/Caucasian  
   [ ] Chinese  
   [ ] Japanese  
   [ ] Korean  
   [ ] Aboriginal/First Nation  
      (e.g., North American Indian, Metis, Inuit)  
   [ ] Filipino  
   [ ] South Asian (e.g., East Indian, Pakistani, Punjabi, Sri Lankan)  
   [ ] South East Asian (e.g., Cambodian, Indonesian, Vietnamese)  
   [ ] Black (e.g., African, Haitian, Jamaican, Somali)  
   [ ] West Asian/Middle East (e.g., Afgani, Arab, Iranian)  
   [ ] Other ethnic/cultural group, please specify: _____________________

3. **What is your first language?**

   [ ] English  
   [ ] Punjabi  
   [ ] Spanish  
   [ ] French  
   [ ] German  
   [ ] Korean  
   [ ] Cantonese  
   [ ] Mandarin  
   [ ] Other ___________________(identify)

4. **Age:** ________

5. **Please provide an email address so we can contact you for the other online components of the study. We will also use your email address to match your responses from different time points, but your responses will remain confidential.**

   Email address (primary): ________________________________

   Email address (secondary): ________________________________
Appendix M: Rumination Measure for Study 3

Think about the most significant negative event in sport over the past week that was personally demanding (such as a setback or failure). Now answer the following questions:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did you find it hard to stop thinking about the problem afterward?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. When thinking about the problem afterward, did your thoughts tend to dwell on negative aspects of it, or how badly you felt about it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Did thinking about the problem tend to make the problem seem worse or make you feel worse about it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix N: Self-criticism Measure for Study 3

Think about the *most significant negative event in sport* over the *past week* that was personally demanding (such as a setback or failure). Please answer the following on a scale from 1 to 10:

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating Scale</th>
<th>Score</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How <strong>often</strong> did you have self-critical thoughts about a recent negative sport event?</td>
<td>Had none</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>A lot of the time</td>
</tr>
<tr>
<td>2. How <strong>powerful</strong> were your self-critical thoughts about a recent negative sport event?</td>
<td>Not at all</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Very powerful</td>
</tr>
<tr>
<td>3. How <strong>intrusive</strong> were your self-critical thoughts about a recent negative sport event?</td>
<td>Not at all</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Very intrusive</td>
</tr>
<tr>
<td>4. How <strong>long</strong> did your self-critical thoughts about a recent negative sport event last?</td>
<td>Fleetingly</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Most of the day</td>
</tr>
<tr>
<td>5. How <strong>distressed</strong> were you by your self-critical thoughts about a recent negative sport event?</td>
<td>Not at all</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Very distressed</td>
</tr>
<tr>
<td>6. How <strong>angry/hostile</strong> were your self-critical thoughts about a recent negative sport event?</td>
<td>Not at all</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Very harassing</td>
</tr>
<tr>
<td>7. How easy was it to <strong>distract</strong> yourself from your self-critical thoughts about a recent negative sport event?</td>
<td>Not at all easy</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Very easy</td>
</tr>
</tbody>
</table>
Appendix O: Concern over Mistakes Subscale for Study 3

Instructions:

The purpose of this questionnaire is to identify how players view certain aspects of their competitive experiences in sport. Please help us to more fully understand how players view a variety of their competitive experiences by indicating the extent to which you agree or disagree with the following statements. (Circle one response option to the right of each statement). Some of the questions relate to your sport experiences in general, while others relate specifically to experiences on the team that you have most recently played with. There are no right or wrong answers so please don’t spend too much time on any one statement; simply chose the answer that best describes how you view each statement.

Please answer each question thinking back over the past week in your sport. Please note that competitive settings can include both training and competition in sport.

<table>
<thead>
<tr>
<th>To what extent do you agree or disagree with the following statements?</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Even if I fail slightly in a competitive setting, for me, it is as bad as being a complete failure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. If I fail in a competitive setting, I feel like a failure as a person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. The fewer mistakes I make in competition, the more people will like me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I should be upset if I make a mistake in a competitive setting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. If a team-mate or opponent (who plays a similar position to me) plays better than me in a competitive setting, then I feel like I failed to some degree.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. If I do not do well all the time in a competitive setting, I feel that people will not respect me as an athlete.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. People will probably think less of me if I make mistakes in a competitive setting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix P: Treatment Fidelity Items for Study 3

How many days during the one week intervention did you engage in / complete the assigned writing task? Please circle *one* response only.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

To what extent did you engage in and make use of the writing activity?

<table>
<thead>
<tr>
<th>Not at all</th>
<th></th>
<th></th>
<th></th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix Q: Participant Feedback Form for Study 3

Feedback

Thank you for participating in this study. In order to better understand your experience, please take a few moments to provide us with some feedback. This information will be considered in the design and implementation of future interventions of this nature.

Please answer the following in regard to the exercise you were involved in as part of this study:

1. Since the formal one week intervention was completed, how often would you say you use the skill taught to you in the intervention (please circle one response only)?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. What did you find effective?

3. What could have been more effective?

4. What did you like?

5. What did you dislike?

6. Do you have any other comments about the study? If so, please use the space below to explain.
Appendix R: Outline of Self-Compassion Intervention Psychoeducation Presentation

Introduction

- Introduce myself again
- Overview of the study
- Overview of session: Consent form, questionnaire package, short presentation, and an applied exercise
- Reminder: study eligibility, reminder of pre-screen (other resources available if self-criticism gets in the way of daily functioning, voluntary
- Go over informed consent form
- Collect signed forms, distribute questionnaires

Presentation – Self-Compassion in Sport

- The Sport Environment
  - Key ideas:
    - Sport is a unique context that presents many issues, challenges, and pressures for athletes.
    - Negative events can arise in the form of failures, setbacks, and evaluation, and, inevitably, athletes have to deal with these circumstances.
    - However, people differ in how they respond to these experiences. Providing athletes with the skills and resources to help them effectively deal with different sport situations will not only help athletes respond in an adaptive manner, but will also help to promote positive and successful sport experiences.

- Overview of Self-Compassion
  - Key ideas:
    - Explain what the construct is
    - Highlight key associations
    - Explain it is most relevant in dealing with negative events

- Self-Compassion Promotion
Key ideas:

- Self-compassion shows promise in helping to attain many of the goals and mind-frames desired by athletes going through difficult times.

- Self-compassion has been conceptualized as an *emotional regulation strategy* that may help neutralize negative emotional patterns and promote positive states of mind (Neff et al., 2005).

- Most self-compassion interventions have been directed towards *cognitive restructuring*, or changing thought patterns - developing skills that could be used in coping with various issues (Allen & Leary, 2010).

Benefits of Self-Compassion

- SC may be an adaptive way to conceptualize and deal with challenges that may even promote a more attuned focus for sport-relevant activities and aid in goal progress.

- Self-compassion permits the acknowledgement and evaluation of weaknesses.

- Cite evidence against passivity

Questions? Provide athletes with opportunity to ask questions

Applied Exercise (Self-Compassionate Writing)

- A way to build self-compassion
  - Distribute handout

- Describe a negative event.

- List ways in which other people also experience events similar to the one described.

- Write a paragraph to themselves expressing understanding, kindness, and concern to themselves. Write as if they were talking to a close friend in the same situation and trying to be supportive.

- Describe the event in an objective and unemotional manner.

- Opportunity for questions

- Distribute workbooks

  - Go through instructions page by page

  - Opportunity for questions
- Go over remaining elements of the study
  o Over the next 7 days:
    ▪ Complete five modules
    ▪ Spend at least 10 mins doing each
  o 2 weeks from now:
    ▪ Online questionnaire
  o Five weeks from now
    ▪ One last follow-up online questionnaire
  o Stress importance of keeping protocol to themselves (as there are multiple sessions being run over a large period of time – having athletes know things ahead of time can influence results)

- Another opportunity for questions
- Thank athletes for their time and participation
- Provide contact info and remind athletes to email or call at any time if questions or issues arise.
Appendix S: Self-Compassion Intervention Applied Example for Session

Example Module – Self-Compassion Writing Exercise

- Think about a negative event in sport that occurred over the past week that was personally demanding.

**Briefly describe the event.**

What happened leading up to the event? Who was there? What happened during the event? What specific thoughts and actions occurred?

**List ways in which other people experience similar events.**

Write a paragraph expressing understanding, kindness, and concern to yourself. Write as if you are communicating to a close friend in the same situation.

Finally, please describe the event in an objective and unemotional manner.
Appendix T: Self-Compassion Writing Modules

Self-Compassion in Sport

High Performance Athlete Journal
Thank you again for your interest, involvement, and support of this study!

This workbook contains a series of modules designed to be completed on five separate occasions over the next 7 days.

Remember, there are no right or wrong answers, and no correct or incorrect way to journal. All that is asked is that you reflect on and think about each activity and spend at least 10 minutes on each occasion writing according to the task instructions.

Also, please note that this workbook is for you to keep and look back on. None of your entries will be read by the research team.

If you have any questions about the writing tasks or anything else related to the study, please do not hesitate to contact the researcher at any point at the contact information provided below.

You will be contacted by email one week after completing these modules and again one month later to fill out an online questionnaire on your own time.

Thank you again for your support! The research team wishes you all the best in your sport endeavours!
Module 1

Consider negative events....

- Think about your most significant setback or failure in sport over the past year that was personally demanding.
- Now take some time to write a brief description of this event by answering the questions below.

- What happened leading up to the event?
- Who was there?
- What happened?
Module 2

Consider commonalities...

- Reflect back on the negative event you described in Module 1.
- Now take some time to think about ways in which other people also experience similar events.
- As you brainstorm, make a list in the space below.
Module 3

Consider support...

- Think back again to the negative event you described in Module 1.
- Now take some time to write a paragraph expressing understanding, kindness, and concern to yourself.
- Write as if you are communicating to a close friend in the same situation.
Module 4

Consider objectivity...

- Once again, think back to the event you described in Module 1.
- Take some time to describe the event once again, but focus on describing the event in an **objective** and **unemotional** manner.
Module 5

Consider putting perspectives into practice...

- Now take the skills you have practiced over the past few days and apply them to a recent situation in sport.
- Think about a negative event in sport that occurred over the past week that was personally demanding.

Briefly describe the event.

What happened leading up to the event? Who was there? What happened during the event? What specific thoughts and actions occurred?

List ways in which other people experience similar events.
Write a paragraph expressing understanding, kindness, and concern to yourself. Write as if you are communicating to a close friend in the same situation.

Finally, please describe the event in an objective and unemotional manner.
Appendix U: Outline of Attention Control Group Psychoeducation Presentation

Introduction
- Introduce myself again
- Overview of the study
- Overview of session: Consent form, questionnaire package, short presentation, and an applied exercise
- Reminder: study eligibility, reminder of pre-screen (other resources available if self-criticism gets in the way of daily functioning, voluntary
- Go over informed consent form
- Collect signed forms, distribute questionnaires

Presentation – Writing for Sport
- Events and Information in the Sport Environment
  o Key ideas:
    ▪ Many different types of events and experiences in sport
    ▪ A variety of information is provided from many different sources
- Processing Information
  o Key ideas:
    ▪ There are many different ways that athletes can process and make sense of events and information. Many athletes talk it over with other athletes or people in their lives, others spend time critically thinking about it, others visualize while they think things over, others ask more questions to make sense of the information and, if applicable, try to practice or directly apply the information.
    ▪ Another method used by athletes is journaling.
      - Provides a record of a multitude of factors that might have an influence on performance
      - Helps to process information, feedback from coaches, or new information you are trying to get a handle on.
Questions?

- Questions? Provide athletes with opportunity to ask questions

- Extended Writing Group
  - Explanation of modules and purpose
  - Timeline explanation

- Applied Exercise (General Writing)
  - Describe a technical skill in your sport
    - Distribute handout
  - Opportunity for questions

- Distribute workbooks
  - Go through instructions page by page
  - Opportunity for questions

- Go over remaining elements of the study
  - Over the next 7 days:
    - Complete five modules
    - Spend at least 10 mins doing each
  - 2 weeks from now:
    - Online questionnaire
  - Five weeks from now
    - One last follow-up online questionnaire
    - Return for another group presentation to build on writing skills
  - Stress importance of keeping protocol to themselves (as there are multiple sessions being run over a large period of time – having athletes know things ahead of time can influence results)
- Another opportunity for questions
- Thank athletes for their time and participation
- Provide contact info and remind athletes to email or call at any time if questions or issues arise.
Example Module

Technical issues in sport...

1. Think about a relevant technical skill in your sport that is important to master.

Briefly describe the skill.

Why is this skill so important?

What specific actions can an athlete take to help build this skill?
Appendix W: Attention Control Group Writing Modules

Writing in Sport
High Performance Athlete Journal
Thank you again for your interest, involvement, and support of this study!

This workbook contains a series of modules designed to be completed on five separate occasions over the next 7 days.

Remember, there are no right or wrong answers, and no correct or incorrect way to journal. All that is asked is that you reflect on and think about each activity and spend at least 10 minutes on each occasion writing according to the task instructions.

Also, please note that this workbook is for you to keep and look back on. *None of your entries* will be read by the research team.

If you have any questions about the writing tasks or anything else related to the study, please do not hesitate to contact the researcher at any point at the contact information provided below.

You will be contacted by email one week after completing these modules to fill out an online questionnaire on your own time. One month later, you will meet again in a group setting and be given information about another set of more specific writing tasks.

Thank you again for your support! The research team wishes you all the best in your sport endeavours!
Module 1

Current events / issues in sport...

- Reflect on a recent issue in your sport that you feel is relevant or interesting to you.
- Briefly describe it in the space below.
Module 2

Hazing in Sport...

- Hazing or initiating players to a team has been a hot topic of debate in recent times.
- In the space below, write about your feelings surrounding hazing. Some ideas to comment on include:
  - Costs versus benefits
  - Personal opinions on the issue
  - Relevance of the issue in your particular sport
Module 3

Varsity Sport Experiences....

- Competing in a varsity sport presents unique opportunities and experiences during your time in university.
- Reflect on one of your favorite memories so far during your varsity sport experience, and briefly describe it below.
Module 4

Technical issues in sport...

- *Think about a relevant technical skill in your sport that is important to master.*

- Briefly describe the skill.

- Why is this skill so important?

- What specific actions can an athlete take to help build this skill?
Module 5

Being a varsity athlete...

- Reflect on what being a varsity athlete means to you.
- In the space below, jot down some of those ideas.