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**FACULTÉ DES ÉTUDES SUPÉRIEURES
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**FACULTY OF GRADUATE AND
POSTDOCTORAL STUDIES**

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GRADE / DEGREE

School of Human Kinetics

FACULTÉ, ÉCOLE, DÉPARTEMENT / FACULTY, SCHOOL, DEPARTMENT

Implementing a Self-regulation Intervention with an Elite Sport Team to Enhance Performance and Cohesion

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IMPLEMENTING A SELF-REGULATION INTERVENTION WITH AN ELITE SPORT
TEAM TO ENHANCE PERFORMANCE AND COHESION

By

Jamie Collins

B.A (Honours), Sport Psychology, Laurentian University, 2007

MASTER'S THESIS

Submitted to the Faculty of Graduate and Postdoctoral Studies in partial fulfillment of the
requirements for the degree of Master of Arts in Human Kinetics

School of Human Kinetics

University of Ottawa

September 2009



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Ottawa ON K1A 0N4
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Your file *Votre référence*
ISBN: 978-0-494-61354-2
Our file *Notre référence*
ISBN: 978-0-494-61354-2

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Acknowledgments

The process of completing this Master's thesis has been both challenging and extremely gratifying. I would like to take the opportunity to thank the many people who helped me along the way, as I could not have done it without you! First of all, I would like to thank my participants, without whom this intervention study would not have been possible – I only hope that you learned as much over the course of this study as I did. I would also like to thank my thesis advisor, Natalie Durand-Bush - thank you for sharing your counselling expertise with me throughout the intervention, for providing me with valuable feedback, and for supporting me during this process. Thanks must also go out to my thesis committee, Dr. Tanya Forneris and Dr. Penny Werthner, for their advice and insight into this project.

While there were a number of people who contributed to the research component of this document, I must also thank those of you who helped me achieve a 'balance' in the final months of this project. Thank you to my family (Mom, Dad, Kate, and Scott) for your emotional support and encouragement, and for letting me turn your kitchen into my "office" when deadlines were fast approaching. Thank you to my friends (you know who you are) for listening to me talk about all of the positive experiences that I have had throughout the process, for supporting me when I needed to vent my frustrations, for letting me bounce ideas off of you, and for pushing me when I got "stuck" – this experience would have been dramatically different without your support!

Thank you, everyone!!!

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Abstract

Literature suggests that in team sport settings, the ability to self-regulate is associated with enhanced teamwork and performance (Bell, 2007). Despite such evidence, little research has explored the ways in which team members regulate themselves (Callary & Durand-Bush, 2008; Wylleman, 2000). As such, applied interventions designed to enhance self-awareness and self-regulation are warranted. The present study documented if and how an elite curling team comprised of four athletes and a coach could enhance their performance and cohesion by engaging in a 24-week learning process designed to help them self-regulate, particularly their felt experiences. A narrative analysis was performed (Polkinghorne, 1995) and results were presented in chronological order to reveal the experiences of all participants over the course of the intervention. Overall, it was found that through self-observation and self-reflection (Zimmerman, 2000), the participants became more aware of him or herself, their environment and how they wanted to feel in order to perform their best. They also developed individual and collective strategies to achieve their desired feel, thoughts, and behaviours, and enhance their responses to obstacles. By learning to regulate themselves and their felt experiences, the athletes and coach unanimously reported that the intervention led to enhanced team performance and cohesion, which contributed to their highly successful season. Implications and future directions are addressed.

CHAPTER I

Introduction

Emotions have an impact on all aspects of daily life, including sport, and “have consequences that go beyond mere emotional experience” (Vallerand & Blanchard, 2000, p. 3). More specifically, scholars believe that emotions can have both intra and interpersonal consequences for athletes, and may also affect performance (Vallerand & Blanchard). According to these authors, displays of emotion on the part of one person affect social relationships as they can affect the emotions, behaviour, and emotional appraisal of others. However, little research has explored *how* emotions impact social relationships. Furthermore, emotion-performance relationship studies have focused predominantly on the role of state anxiety in sport performance (Vallerand & Blanchard) and have paid little attention to athletes’ overall felt experiences. As such, some researchers have begun to examine the multidimensional felt experiences of athletes and coaches that extend beyond mere emotions (Arcand, Durand-Bush, & Miall, 2007; Burke & Durand-Bush, 2009; Callary & Durand-Bush, 2008; Doell, Durand-Bush, & Newburg, 2006) and have called for more research. Consequently, this research project focused on the broader felt experiences of an elite sport team with a particular emphasis on social dimensions.

As stated by Vallerand and Blanchard (2000), emotions are reactions to events or situations that result in “physiological, experiential, and behavioural changes” (p. 7). Recent literature demonstrates that emotional experiences can help differentiate between optimal and sub-optimal performance states, however, Hanin (2007) suggests that so do non-emotional experiences. For example, an athlete might describe an optimal performance as being one for which s/he felt like a *tiger*, meaning that s/he felt *strong* and *focused*. Clearly, words such as *strong* and *focused* represent non-emotion states and define this athlete’s ideal performance state (Hanin). As such,

when working towards achieving optimal performance states, it is insufficient to consider only an athlete's emotions. Durand-Bush and colleagues have differentiated multidimensional felt experiences from traditionally defined emotions (e.g., happiness, sadness, anger). Their research has led them to propose that felt experiences comprise not only an emotional dimension but physical, cognitive, social, and spiritual ones as well (Arcand et al., 2007; Burke & Durand-Bush, 2009; Callary & Durand-Bush, 2008; Doell et al., 2006; Lussier-Ley & Durand-Bush, 2009; Simon & Durand-Bush, 2009; Wolfe, 2006). Results of this scholarly work have shown that how athletes feel affects their social functioning and how they perform. Only two of these studies shed light on athlete-coach relationships by examining teams comprised of both athletes and coaches (Callary & Durand-Bush; Wolfe, 2006). Consequently, it would appear to be important to increase our understanding of how teams of athletes and coaches influence how they feel and more importantly, how they can learn to regulate the way they feel in order to fully comprehend their sporting experience and performance. Such research could provide valuable insight into the impact of self-regulation on performance and team cohesion.

According to Ravizza (2001), in order for athletes to be able to exert control over their behaviours and emotions in sporting contexts, they must first develop an awareness of their emotional states. An ability to regulate emotions has been associated with enhanced teamwork and team performance (Bell, 2007), and this might be especially true for elite athletes who may experience greater intensity and fluctuations in emotions due to the extreme pressure environment in which they must perform. For example, Olympic level athletes must handle many challenges that could impede emotional regulation such as the pressure to win based on world standings, the struggle of balancing sport with friends and family, coping with gruelling training and travelling schedules, dealing with the media, and maintaining a bond with teammates and coaches, to name a

few (Gould, Greenleaf, Guinan, Dieffenbach, & McCann, 2001). However, despite the importance of emotional regulation, little is known about *how* team sport athletes and coaches actually regulate their emotions and overall team functioning (Wylleman, 2000). As such, applied sport psychology interventions designed to enhance self-awareness and self-regulation are warranted.

Resonance is a self-regulatory approach that served as the framework for the current study because it has at its core the concept of feel (Newburg, Kimiecik, Durand-Bush, & Doell, 2002). It aims to guide individuals through ongoing learning to help them become more self-aware and self-regulated, particularly with respect to how they feel. Specifically, the approach leads individuals to not only identify how they want to feel from a multidimensional perspective (Callary & Durand-Bush, 2008), but also prepare to feel this way and distinctively respond to obstacles by revisiting their desired feel (Newburg et al.). As a self-regulation process, it underlines individuals' efforts to alter their inner states or responses to bring themselves into line with preferred standards (Vohs & Baumeister, 2004; Zimmerman, 2000). In Carver and Scheier's (1981) words, it leads individuals to become consciously aware of the discrepancies between their current and desired self-states, and to then consciously choose to engage in actions to reduce these discrepancies. Congruent with Vohs and Baumeister's observations, individuals experiencing resonance possess the skills to maintain harmony between their inner self and their social and physical environment (Simon & Durand-Bush, 2009).

Studies have shown that individual sport athletes have benefitted from participating in a resonance intervention in which perceptions of performance and well-being were enhanced as a result of increased self-awareness and self-regulation (Arcand et al., 2007; Doell et al., 2006; Durand-Bush, Faubert, & Newburg, 2004). Favourable results were also obtained when the resonance approach was implemented with two university sport teams (Callary & Durand-Bush,

2008; Wolfe, 2006) and with a group of modern dancers (Lussier-Ley & Durand-Bush, 2009). However, only Callary and Durand-Bush explicitly examined the role of the coach in the self-regulation process. Furthermore, the resonance process has not been examined with an elite sport team, specifically focusing on cohesion and overall team functioning. Considering this and the fact that little is known about the core processes involved in the day-to-day functioning and self-regulation of sport teams and that psychological interventions intended to improve this are lacking (Jowett & Wylleman, 2005), the current study was conducted. Specifically, the purpose of this study was to document if and how athletes and coaches comprising an elite sport team could enhance their performance and cohesion by engaging in a learning process designed to help them self-regulate, particularly, their felt experiences. It was anticipated that this research involving a feel-driven, group self-regulation intervention would generate findings to further our understanding of how emotional regulation, or more precisely, the regulation of felt experiences, may enhance the sport experience of an elite team.

CHAPTER II

Literature Review

Resonance

Resonance is a dynamic and interactive process through which individuals regulate their felt experiences to experience harmony between their inner self and external environment, and optimize performance and well being (Newburg et al., 2002). Feel is at the core of the resonance process, and is a subjective multidimensional experience that is mediated by one's ability to perceive, to be aware of, or to be conscious of one's inner self and environment (Callary & Durand-Bush, 2008; Simon & Durand-Bush, 2009). In this context, feel is meaningfully constructed by the individual; it is not a predetermined experience imposed by a researcher or consultant. In this sense, it is self-defined and can be experienced, for example, physically (I feel strong), cognitively (I feel confident), emotionally (I feel happy), socially (I feel part of the group), and also spiritually (I feel at peace). Moreover, felt experiences can change over time and across situations through increased awareness, learning, and self-regulation (Arcand et al.; Callary & Durand-Bush; Doell et al., 2006; Lussier-Ley & Durand-Bush, 2009; Simon & Durand-Bush; Wolfe, 2006). The concept of resonance is based on the assumption that when people find meaning and experience engagement in their daily activities by feeling the way they want, they will perform optimally and experience well-being (Newburg et al.).

The Resonance Performance Model

The Resonance Performance Model (RPM; see Appendix A) was developed by Dr. Doug Newburg and is grounded in his research and consulting work with over 300 expert performers (Newburg et al., 2002). Newburg used a case-study approach to analyze expert performers and found that, overall, they shaped their lives according to how they felt when performing

optimally. He developed the RPM as a model to guide individuals to develop their own personal resonance process and regulate the way they want to feel. The RPM consists of four components that have been adapted from Newburg's original work (Newburg et al.): The Way You Want To Feel, Preparation, Obstacles, and Revisit The Way You Want To Feel (Callary & Durand-Bush, 2008).

The first component of the RPM, The Way You Want To Feel, speaks for itself and represents the way an individual wants to feel when engaging in an activity. It is not a desired outcome nor goal, but rather an internal experience that motivates an individual to pursue his or her chosen activity (Durand-Bush et al., 2004; Newburg et al., 2002). In essence, the way one wants to feel drives the pursuit of goals and can give a sense of engagement in the process in which one engages to get there (Newburg et al.).

The Preparation component involves preparing to experience one's desired feel in the pursuit of chosen goals. Preparation may be physical, cognitive, technical, tactical, social, organizational, and/or emotional in nature (Durand-Bush et al., 2004). In order to prepare adequately, individuals must not only develop the necessary skills to succeed, but also the strategies that "elicit the feelings they desire on a consistent basis" (Newburg et al., 2002, p. 254). To date, several preparation strategies of athletes have been documented including proper stretching, sleep, and nutrition, imagery, effective communication, self-talk, and competition planning, to name a few (Callary & Durand-Bush, 2008; Doell et al., 2006; Newburg et al.).

It is unrealistic to think that people can go through life without encountering any setbacks or difficulties. The Obstacles component of the RPM acknowledges this and it has been found that individuals can encounter both internal (e.g., anxiety, fear) and external (e.g., parental pressure, poor weather conditions) obstacles that prevent them from feeling the way they want

(Durand-Bush et al., 2004; Newburg et al., 2002). The resonance approach leads individuals to accept these setbacks and avoid getting caught in the ‘obstacle-preparation loop’ in which they lose sight of the way they want to feel. Studies have shown that when setbacks are encountered, athletes benefit from revisiting how they want to feel before returning to more preparation (Durand-Bush et al.; Newburg et al.).

Revisit The Way You Want to Feel is the RPM’s fourth component in which individuals reconnect with their desired feel and the intrinsic motives that drive participation in an activity (Newburg et al., 2002). Like preparation strategies, revisiting strategies may be physical, cognitive, technical, tactical, social, organizational, and/or emotional in nature and may be applied immediately when encountering an obstacle or later after a period of reflection (Doell et al., 2006; Newburg et al.). In the case of athletes, these strategies may also be unrelated to sport and can include, for example, spending time with a friend or a family member (Doell et al.).

In summary, the RPM is a tool serving to guide individuals to regulate their felt experiences by identifying how they want to feel in their everyday activities, preparing to experience this, anticipating and responding to obstacles that prevent them from feeling the way they want, and revisiting how they want to feel when necessary (Callary & Durand-Bush, 2008; Newburg et al., 2002). The resonance process “represents the application of the RPM components into one’s life undertakings; it is reflected by the ability to move harmoniously between its components in a way that life feels resonant” (Durand-Bush et al., 2004, p. 6). The following section focuses on studies in which the RPM was used to guide self-regulation interventions in the context of sport in an attempt to optimize performance and well-being.

Resonance as a Feel-Based Intervention

Research on resonance has demonstrated the value and benefits of using the RPM as a framework to conduct feel-based self-regulation interventions with athletes (Arcand et al., 2007; Callary & Durand-Bush, 2008; Doell et al., 2006). Multiple case studies with over 50 individual sport athletes from a variety of sports and levels of competition have shown that one-on-one resonance interventions helped the athletes to better regulate their felt experiences in their sport and daily life. Through increased self-observation, self-monitoring, self-reflection, and self-awareness (Zimmerman, 2000), they were able to feel more the way they wanted and overcome setbacks that challenged their felt experiences. In general, the interventions involved multiple one-on-one sessions between the athletes and researcher/consultant that spanned anywhere between 4 and 17 weeks. In over 90% of the cases studied, the athletes reported enhanced perceptions of performance and well-being (Arcand et al.; Doell et al.; Durand-Bush et al., 2004).

Resonance as a Group Process

While the benefits of resonance interventions with individual sport athletes have been consistently documented, only three studies have examined if and how the resonance process may collectively affect teams of individuals. A team-based resonance process was first explored with a group of six pre-professional modern dance students (i.e., one man, five women) who were between the ages of 19 to 26 years (Lussier-Ley & Durand-Bush, 2009). In this study, the researcher adopted an ethnographic approach and data were collected through participant observation, 12 weekly group discussions centered on resonance and related themes, reflexive journaling, field notes, and videotaping. The researcher/consultant immersed herself in the context over a period of four months to carry out the intervention and collect the data, with the

goal of determining whether or not felt experiences impacted both individual and collective creativity.

Results of this study indicated that how the dancers felt did in fact greatly influence their performance and their creative process. As such, they saw a need for the intervention and benefitted from it (Lussier-Ley & Durand-Bush, 2009). During the group sessions, they aimed to develop and nurture a group resonance process and the dancers spoke of not only how they each wanted to feel, but how they collectively wanted to feel. Throughout the intervention, the dancers' expressions of their felt experiences eluded to the multidimensional nature of feel, as many described the physical, cognitive, emotional, social, and spiritual components. For example, one athlete described both the physical and spiritual components of feel when she stated:

That's when you feel great! I guess you kind of feel like you can go bigger. Your body knows its, I'm going to say "limits", but where it still is in control but I'm going to say also "effective"... it's that sort of feeling when you get to a point when it's great just to be on stage and letting your body go and just be dancing the piece... I feel like in every piece I am myself (Lussier-Ley, 2006, p. 61).

Overall, the dancers identified that they wanted to feel in the moment, connected, and a sense of well-being. In order to achieve and regulate this, they identified and implemented preparation strategies including pre-competitive routines, stretching, and time management. Interestingly, they reported that the group resonance discussions served as a preparation strategy to work towards feeling the way they wanted (Lussier-Ley, 2006).

Inevitably, throughout the development of their resonance process, the group of dancers encountered numerous obstacles that challenged their felt experiences. One of the primary

obstacles was that they were 'swallowing' their emotions and avoiding them, rather than working towards their desired feel. Other obstacles included using negative or inappropriate self-talk, consciously thinking about the performance sequence, and allowing distractions such as mirrors to interfere with the creative flow of movement. In the end, the dancers were able to use the strategies articulated in the preparation phase, such as 'tuning into feel', and also engage in other enjoyable activities to revisit how they wanted to feel, thus allowing them to stay connected to themselves and their environment to experience resonance (Lussier-Ley & Durand-Bush, 2009). As a result, their increased ability to regulate their individual and collective feel enhanced their creative experiences:

Before these [focus group discussions], I don't believe I actually consciously thought about my own creative processes. That alone has spurred on a lot of exploration on many different levels... In one of our first sessions, I actually realized that I am a creator. (Lussier-Ley & Durand-Bush, p. 15).

Unique to this study was Lussier-Ley and Durand-Bush's (2009) use of an ethnographic approach to examine the process of resonance. This approach was valuable in that it allowed the researcher/consultant to immerse herself in the study, and thus she was able to express in rich detail the individual and collective felt experiences of the dancers. However, given that such an approach requires considerable time and effort on the part of the researcher/consultant, it was recommended that alternative approaches to group resonance studies be explored. Finally, educators were excluded from the process in this study so as to ensure that the dancers felt comfortable expressing themselves without fear of consequences. However, since it was found that teachers largely influenced how the dancers felt both individually and collectively, it was recommended that the role of support agents be examined in future resonance studies.

Another study conducted by Wolfe (2006) documented the evolving resonance process of a team of 14 university club-level synchronized swimmers and their coaching staff, a female head-coach, and a female assistant coach. At the beginning of the team's competitive season, the researcher/consultant conducted two separate pre-intervention interviews – one with the athletes, and one with the coaches. The purpose of these interviews was to situate the researcher in the context of the team, as well as to discuss and observe the interpersonal relationships and group dynamics. Next, the athletes participated in 11 group intervention sessions, with two of the sessions involving both athletes and coaches. During this time, two intervention sessions were also conducted with the coaches alone. Finally, at week 13, a post-intervention interview was carried out with the group of athletes and the head coach separately.

Results revealed that there was a great deal of inner conflict among team members, especially between the athletes and head coach. In time, each team member realized that they did not feel the way they wanted, yet coming up with solutions and putting them into action proved to be quite difficult. One athlete stated:

I find myself leaving practice, almost every practice, feeling completely like I'm losing my self esteem and that I suck basically. That's all I can think, and I don't know. I don't want to quit because I don't want to leave the team high and dry, but I feel awful...and I don't know how to deal with it" (Wolfe, 2006, p. 65).

With the help of the feel-based intervention, the athletes and coaches were able to discuss their feelings in an attempt to resolve their differences. Both the athletes and coaches acknowledged their discontentment with their current situation, and in the end, the head coach decided to leave the team, which allowed both her and the athletes to feel more the way they wanted both individually and collectively (Wolfe).

One of the strengths of Wolfe's (2006) study was that it was the first to incorporate coaches into a team resonance intervention. As such, various aspects of group dynamics, including how athlete-coach relationships impact individual and collective feel, were explored. In this study, athlete-coach conflict emerged early on and evidently had a large impact on how the team members felt and performed. However, following the head coach's wishes, she did not participate in several of the group sessions with the athletes and the conflict was not addressed until late in the season, at which point it may have been too late to resolve it. Thus, it was recommended that future research actively involve the coach from the beginning into team intervention studies so that any issues arising from interpersonal relationships, leadership, and communication may be addressed as they arise.

Overall, the results of Wolfe's (2006) study highlighted the importance of commitment and teamwork in the resonance process. In this case, the athletes and coaches were not able to connect and consistently feel the way they wanted partly because they did not take ownership of the issues at play and they were not held accountable for their actions. Instead, they blamed each other for behaving in ways that left them feeling and performing poorly. As such, it is especially important in these types of cases that the researcher/ consultant guiding the intervention evaluate team readiness and commitment, nurture communication and conflict resolution, and lead team members to examine both individual and collective feel so as to help them self-regulate on a more consistent basis. Evidently, more research involving both coaches and athletes must be conducted to increase our understanding of the roles they each play in the resonance process and the strategies they may develop to strengthen and manage their felt experiences.

The third and final study involving a team resonance approach was conducted with a women's varsity volleyball team comprised of 16 athletes and their male coach (Callary and

Durand-Bush, 2008). The purpose of this study was to explore the coach's role in facilitating and sustaining desired felt experiences with his team, and the effect of a team resonance intervention on performance and well-being. Data collection spanned three phases: pre-intervention, intervention, and post-intervention. The pre-intervention phase took place over a six week period during which data were gathered through observation and field notes, as well as one semi-structured, open-ended interview with the coach and another with the athletes. Throughout this phase, group interactions were observed and the researcher/consultant explored how aware the athletes and coach were of how one another felt and wanted to feel. This phase also served to situate the researcher/consultant in the team context and establish rapport and trust (Ivey & Ivey, 2007). During the intervention phase, data were collected through four group resonance sessions with the athletes and coach, four one-on-one interviews with the coach following each group session, reflective journaling, and participant observation. The researcher removed herself from the context during the six week post-intervention phase aimed to examine if and how the coach was able to sustain the resonance process developed during the intervention phase. At the end of the post-intervention phase, the researcher conducted two separate interviews, one with the coach and another with the athletes in order to assess the perceived effects of the intervention on performance and well-being.

Results showed that although most of the athletes and coach knew how they wanted to feel individually in order to perform at their best, they had never thought about or reflected on how they wanted to feel as a group. Over the course of the intervention, the team was able to develop their resonance process and identify their collective feel, which was characterized as unstoppable, strong, and rhythmic (Callary & Durand-Bush, 2008). As a team, they came up with strategies to achieve this:

One of the coolest games this year, where it was really rhythmical, we all got together beforehand and said “What we really need to do is have more celebration after the point”... it made us feel like we were all there, we were all celebrating the same thing, we were all excited about it. It took a little bit of the edge off and made the game a little bit more rhythmical, better in the end. (Callary, 2007, p. 24)

Through enhanced communication and interaction, the athletes and coach realized the impact that each person had on the atmosphere at practices and games. They were able to develop a shared awareness of how they each felt and determine strategies that enabled them to feel optimally on an individual and collective basis. Obstacles were also addressed individually and collectively and each athlete developed different strategies to reconnect with their desired feel. For example, some athletes posted positive reminders in their lockers while others took time to relax and listen to music before practice (Callary, 2007).

Over the course of the intervention, the team members realized that they were able to take control and create a team atmosphere that was congruent with how they wanted to feel. When asked to reflect on the process, one athlete stated: “I’ve always known exactly how I’d like to feel when playing sports but I find it hard to always get there. Now, though, I find that I’m at that point more often, even when I’m having an off day” (Callary, 2007, p. 79). Overall, both the athletes and coach felt that the intervention was extremely successful, as it helped them regulate their desired felt experiences on a more consistent basis, and thus contributed to their successful season. When asked about learning and facilitating the resonance process for his team, the coach stated that it was:

A very valuable part of focused training with our team, it’s just not a little aside anymore. These kids have realized that they play their best when they feel their best, and that they

control as best they can their atmosphere and their attitude and help bring each other back when they're falling off the cliff, all the little things that they can do with the work attitude. Yes, this is a big part of what I wanted for the team. The process that you worked with this year, I hope to continue to expand on it, and reset it when needed and run with it at other times. (Callary & Durand-Bush, 2008)

Results of this study demonstrated that a willing and dedicated coach may learn the resonance process through a guided intervention and continue to implement it in the absence of the researcher/consultant. However, interestingly, the coach in this study preferred to keep the researcher/consultant involved with the team on a more long-term basis: "The coach asked me to continue working with the team next year. He said that he would not want to run the sessions himself because he knew the athletes benefitted from reflecting on and sharing private reflections with me" (Callary & Durand-Bush, 2008). The coach also mentioned the personal benefits he reaped from working with the researcher/consultant throughout the intervention:

I think that by having you regularly involved, I never had a chance to get caught up too long going in a wrong direction without becoming aware of it. Having another meeting every so often, whether it was having conversations with you at practice, it just kept me on track with what I believe in (Callary & Durand-Bush).

As such, it appears to be worthwhile to conduct more research with teams involving both coaches and athletes to determine the potential long-term benefits of working with a researcher/consultant to develop and maintain self-regulation skills. It would be advantageous to explicitly examine additional team variables such as cohesion as this was not a focus of Callary and Durand-Bush's study. It is only when interventions will have been conducted with several

teams that researchers will be able to put forth more general guidelines to enhance the overall functioning of teams through self-regulation.

Team Cohesion

Although much research has been conducted with sport teams, little is actually known about the processes involved in the regulation of their everyday functioning (Dunn & Holt, 2004; Jowett & Wylleman, 2005). One group process that has received considerable attention is cohesion, as it is believed to play a large role in group functioning (Eys, Burke, Carron, & Dennis, 2006). Team cohesion is defined as “a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of members’ affective needs” (Carron, Hausenblas, & Eys, 2005, p. 229). It is believed that there is a strong cyclical relationship between cohesion and performance such that group cohesion contributes to enhanced performance, and enhanced performance increases cohesion among team members (Carron et al.). These findings have been evidenced by a meta-analysis showing a moderate to large cohesion-performance relationship ($ES=.665$, Carron, Colman, Wheeler, & Stevens, 2002).

Current research suggests that there are two types of cohesion: task and social. Task cohesion is present when team members work well together to complete a common goal whereas social cohesion is present when members of a team get along and maintain friendships (Hardy, Eys, & Carron, 2005). In the meta-analysis conducted by Carron and colleagues (2002), both social ($ES = .702$) and task ($ES = .607$) cohesion were shown to positively impact performance. However, it is important to note that social cohesion showed the strongest relationship with performance, suggesting that interventions that focus on building interpersonal relationships among team members may have more positive effects on performance.

According to Eys and colleagues (2006), there are many correlates of cohesion, each of which can be divided into four categories: environmental, personal, leadership, and team factors. The environmental correlates of cohesion are proximity, distinctiveness, and team size. Proximity suggests that when teams are frequently in close contact, they are more likely to bond together, while distinctiveness refers to the fact that when team members see themselves as being different from other groups, and as having commonalities with the other group members, cohesiveness quickly develops. Team size is the final environmental correlate of cohesion, and studies have shown that moderately sized groups are most cohesive, likely because interaction and communication are easier.

Among the personal factors involved in the development of cohesion are satisfaction, effort, and similarity. When athletes are satisfied with their sport experiences (e.g., group interactions, athlete-coach relationships, etc.), group unity is enhanced. Furthermore, in cohesive groups, individual effort is increased as athletes do not want to fall short of their teammates' expectations. Finally, cohesion is enhanced when members of a group share similar attitudes, goals, commitment to the team, and sport ability (Eys et al., 2006).

The leadership correlates of cohesion relate to athlete-coach compatibility and coaches' decision styles. Taken together, leadership factors suggest that when athletes' and coaches' task-goal motivations are congruent, and when coaches use a participative or democratic approach to team-decision making, teams are likely to experience greater cohesion (Eys et al., 2006).

The final category of variables associated with cohesion is team factors such as group characteristics (e.g., roles and team norms) and group processes (e.g., goal-setting, interaction, and communication). According to Eys and colleagues (2006), a role is a "set of behaviors that are expected from the occupants of specific positions within the group" (p. 164). When athletes

understand and accept their role(s) on a team, team members experience not only enhanced cohesion, but also less anxiety and more satisfaction with their sport experience. Norms are also linked to cohesion as they provide standards for acceptable behavior. Examples of team norms include putting in maximal effort in games and practices, supporting teammates, and maintaining social contact with team members. Norms can also relate to productivity and are a strong predictor of performance in highly cohesive teams. Finally, effective interactive group processes such as goal-setting and communication have been positively linked to team unity.

The correlates of cohesion, as discussed by Eys and colleagues (2006), can offer valuable insight into how to structure group-based interventions designed to enhance team cohesion. As suggested by Anshel (2003), “the feeling of togetherness is considered important in satisfying player needs, deriving and making the effort to meet team goals, enhancing each player’s loyalty to the team and coach, and gaining support among teammates” (p. 193). As such, in order to maximize unity, it appears that interventions should address the factor of proximity so that team members have ample opportunities to communicate and interact with one another. During this time, commonalities and similarities among group members, such as grueling practice schedules and reduced time for family and friends, could be highlighted so as to create a common bond among the team. Furthermore, it may be inferred that discussions should address team issues, such as group goals, roles and norms, and leadership style, while providing athletes and coaches with the opportunity to arrive at decisions together. It would seem logical that these correlates of cohesion be integrated into self-regulation interventions aiming to maximize team functioning and unity.

In a study by Dunn and Holt (2004), the effects of a personal-disclosure mutual-sharing team building activity were measured. The study aimed to create an environment of mutual

understanding and shared cognition among team hockey players prior to a national championship. The activity required sharing a personal experience with the group; one that involved disclosing personal thoughts, feelings, and ideas. Results of the study revealed that the team-building activity contributed to an increased understanding of the self and others, as well as group cohesion. This suggests that when asked to share personally meaningful stories, similar to those shared during group-based resonance interventions for example (Callary & Durand-Bush, 2008; Lussier-Ley & Durand-Bush, 2009; Wolfe, 2006), athletes may perceive an increased individual and collective awareness and sense of unity. Based on the cohesion-performance relationship (Carron et al., 2002), this may lead to enhanced individual and team performance.

The Athlete-Coach Relationship

The athlete-coach relationship is fundamental to every team and influences not only sport performance, but also athlete satisfaction (Jowett & Cockerill, 2003; Pocwardowski, Barrot, & Henschen, 2002). Based on a multitude of sport studies, it is believed that successful athlete-coach relationships are formed through complementarity, closeness, and co-orientation.

Behavioural complementarity refers to corresponding or harmonizing athlete-coach interactions, motivations, and the resources that each one possesses. Closeness reflects the emotional tone of the relationship, whereas co-orientation refers to well-matched cognitions, such as shared beliefs, values, thoughts, and goals (Jowett & Cockerill; Jowett & Meek, 2000; Philippe & Seiler, 2005).

In a study on athlete-coach relationships among 12 Olympic medalists, each athlete interviewed reported that complementarity, which they identified as hard work, cooperation, and support, characterized their relationships with their coaches (Jowett & Cockerill, 2003). The relationships were also classified as having emotional closeness, specifically, trust, liking, respect, belief, and commitment. Two of the athletes, however, reported a negative closeness

(e.g. feeling like they were being used, having a lack of trust, or an absence of emotional closeness) with their coaches, and also acknowledged that this had negative consequences for their performance and development. Finally, the majority of participants (N=8) reported their relationship with their coaches as being co-oriented, and believed that positive communication and common goals led to shared knowledge and understanding. These results suggest that cooperation, closeness, and communication are fundamental in building positive athlete-coach relationships. These findings are consistent with those of Philippe and Seiler (2005) who examined athlete-coach relationships among five male national level swimmers. The fact that highly successful athletes characterize their relationships with their coaches as being close, based on trust, respect, and shared beliefs supports the need for integrating both athletes and coaches in team interventions designed to enhance group interactions and interpersonal relationships. However, it is important to note that both of the studies discussed (Jowett & Cockerill; Philippe & Seiler) examined the athlete-coach relationship among individual sport athletes; therefore, further research is needed to examine these relationships within teams.

One recent study by Jowett and Chaundy (2004) examined the impact of leadership behaviour and athlete-coach relationships on team cohesion in different team sport contexts. Results indicated that when the coaches' leadership behavior (i.e., training and instruction, decision style, social support, and feedback) and athlete-coach relationships were considered in relation to the three C's (complementarity, closeness, and co-orientation), these variables accounted for 34% and 15% of the variance in task and social cohesion, respectively. However, when considered in isolation, leadership behavior explained only 26% and 12% of the variance in task and social cohesion, respectively, suggesting that leadership and relationship variables explain a greater amount of the variance in task and social cohesion when considered together.

Overall, findings of this study suggest that positive athlete-coach relationships, in combination with congruent leadership behaviour, may lead to not only increased team unity but also enhanced performance.

Purpose of the Study

In summary, based on the literature discussed, it is apparent that research involving team sport athletes and coaches that is focused on strategies or interventions designed to enhance team functioning, relationships, and cohesion is warranted. Based on the data from three studies involving a group resonance approach, it is believed that a team-based resonance intervention attempting to enhance the self-regulation of both athletes and coaches may lead to increased team cohesion and performance. However, it is noteworthy that to date, no resonance studies have focused on team cohesion or have been conducted with an elite sport team; thus, this is a warranted area of research that could give additional insight into the roles that coaches and athletes play in helping each other achieve optimal felt experiences and performance.

The present study is in line with the mission of the Coaching Association of Canada (CAC, 2008) to “enhance the experiences of all Canadian athletes through quality coaching” as well as that of Sport Canada to “enhance opportunities for all Canadians to participate and excel in sport” (2008). Specifically, the purpose of the present study was to document how an elite sport team comprised of four athletes and a coach competing in a high performance coaching context (CAC), could enhance their cohesion and performance by engaging in a learning process designed to help them self-regulate, particularly, their felt experiences. Specific research questions that were addressed included: By participating in a team feel-driven self-regulation intervention facilitated by a researcher/consultant using the RPM as a framework (Callary & Durand-Bush, 2008, adapted from Newburg et al., 2002), how can a coach and his athletes help

themselves and each other to (a) feel the way they want, (b) prepare to feel the way they want by aligning their desired feel, thoughts, and actions, (c) anticipate and overcome obstacles that get in the way of their desired feel, (d) reconnect with how they want to feel when necessary, and (e) optimize performance and cohesion?

Based on previous findings, a hypothesis was that athletes and coaches would learn to increase their ability to feel and to regulate their overall felt experiences by enhancing their ability to perceive, to be aware of, or to be conscious of their inner self and environment (Callary & Durand-Bush, 2008) through self-regulation sub-processes including self-observation, self-monitoring, and self-reflection (Zimmerman, 2000). Another hypothesis was that if coaches and athletes felt better about themselves on a more consistent basis as a result of regulating their felt experiences and consciously choosing to engage in activities based on team interests, goals, and desired felt experiences, the team's performance and cohesion would not only be enhanced, but would be more sustainable over time.

The present study was the first to examine the influence of a feel-based self-regulation intervention on an elite team comprised of athletes and coaches. Furthermore, it was the first of its kind to target crucial aspects of group functioning, specifically cohesion, in order to explore how felt experiences influence social relationships and processes like communication, and vice versa. Thus the results expand the literature pertaining to feel and resonance, self-regulation, cohesion, and elite sport. From an applied standpoint, this study provides valuable insight into the implementation of a feel-based self-regulation approach to consult with teams in an attempt to enhance their performance and cohesion.

CHAPTER III

Methodology

The following section outlines the research paradigm and methodological framework that were used to guide the present study. As this study involved both a researcher and a consultant, their preparation and respective roles in the intervention process are also defined, along with how the participants were selected. Finally, the procedures that were used to collect and analyze the data and to ensure trustworthiness are presented.

Research Paradigm

The present study is based on the participatory paradigm, which aims to advocate change (Creswell, 2007). The basic assumption of this paradigm or worldview is that “research should contain an action agenda for reform that may change the lives of participants, the institutions in which they live and work, or even the researchers’ lives” (Creswell, p. 21). In essence, the goal at the completion of participatory studies is to have promoted change and fostered feelings of personal empowerment. This process is believed to be collaborative, involving both the researcher and the participant, as exploration of the self is believed to be achieved “with” others. Both parties are active participants in the research process (Creswell; Heron & Reason, 1997), as it is postulated that participation forms reality (Denzin & Lincoln, 2000).

With an emphasis being placed on shared lived experiences (Heron & Reason, 1997), the RPM framework used to guide feel-based interventions (Callary & Durand-Bush, 2008) is much in line with the views of the participatory paradigm. Evidently, in the feel-based intervention carried out in this study, the realities of each participant were shaped by the social context (i.e., the environment, the team, the consultant, and the researcher), allowing them to make sense of their reality by *participating* with the objects and events in their world, and interacting with one

another (Heron & Reason). As such, the experiences of each team member were considered to be unique and were documented throughout the intervention.

Aside from viewing participants as actively constructing their own reality, the participatory worldview also acknowledges that the researcher, who is an active participant in the process, inevitably influences perceptions of reality. In this study, it is thus recognized that the research process, including the intervention, as well as the personal characteristics and experiences of the researcher and consultant who guided the intervention inevitably shaped the reality and lived experiences of the participants.

Methodological Framework

As explained above, the participatory worldview holds that reality is subjective-objective, meaning that “things become what our consciousness makes them through the active participation of our mind” (Skolimowski, 1994, p. 27-28). Consistent with the postulates of a participatory paradigm, case studies are a method of inquiry used when researchers are interested in understanding individual cases, groups, or related concepts (Stake, 2005; Yin, 2003). Therefore, in order to carry out this study, a case study approach was used as it allowed the researcher to explore and document the various points of view of four athletes, a coach, and a consultant, acknowledging that no two participants would have the same interpretation of truth and reality (Crotty, 1998; Yin, 1994).

Case studies are defined as “an empirical inquiry that...investigates a contemporary phenomenon within its real-life context, especially when...the boundaries between phenomenon and context are not clearly evident” (Yin, 2003, p. 13). That is, researchers using case studies are interested not only in individual experiences with particular events, but also with the conditions in which they occur (Yin, 2003), such as a team-sport environment. Accordingly, this

methodology is consistent with the aim of the present study to document individual and team felt experiences, or the real life processes of each athlete and coach. In essence, this study examined several phenomena (Yin, 1994), specifically feel, resonance, performance, and cohesion within the context of an elite sport team.

There are two types of case study designs that can be used in qualitative research: single-case and multiple-case studies. While both types fall within the same methodological framework, single-case studies are used when researchers are interested in the views and experiences of only one individual, whereas multiple-case studies are used to examine both the common experiences and individual differences among numerous participants (Yin, 2003). In the current study, a multiple-case study approach was used to look at a complete sport team comprised of four athletes and one coach, one consultant who guided the intervention, as well as one researcher. According to Yin, by examining numerous participants through several studies, the multiple-case study approach may increase the generalizability of common experiences among participants to other teams, and individual differences among team members may help contribute to the development of theoretical frameworks, such as a framework for group self-regulation interventions. A multiple case study approach has been used in past studies examining both individual and group resonance processes (Arcand et al., 2007; Callary & Durand-Bush, 2008; Doell et al., 2006; Lussier-Ley & Durand-Bush, 2009; Simon & Durand-Bush, 2009; Wolfe, 2006), as well as in studies examining optimal athletic performance and group dynamics (Jowett & Cockerill, 2003; Jowett & Meek, 2000).

A case study approach was particularly useful in the present study as it is the ideal method to use when examining “how” or “why” questions in a present-day context that are not within the researcher’s control (Yin, 2003), such as a sporting environment. More specifically,

an *explanatory* case study approach was chosen to provide a description of the details surrounding the cases, and explanations that were most congruent with the details of the cases (Yin, 1981). Thus in essence, various potential explanations clarifying how the intervention and everything that surrounded it affected the team and more specifically, their felt experiences, cohesion, and performance were provided.

Participants

In line with the participatory framework, numerous participants took part in the intervention, that is, the athletes (N = 4), the coach, the consultant, and the researcher. In the section below, descriptive information regarding the participants as well as recruitment procedures are outlined.

Athletes and Coach

The present study involved an elite curling team and the reason for choosing this sport was due to the size of the team. Two past studies in which a group resonance intervention was implemented were conducted with larger sport teams; therefore this study was unique in that it focused on a smaller team involving only four athletes and one coach. The gender of the athletes and coach was not delineated ahead of time. The team consisting of four female athletes and one male coach was chosen based on the members' willingness and commitment to participate in the lengthy study spanning their entire season. For the purpose of this study, an elite team was defined as one performing in a High Performance context categorized in "Stream 2 – Competition" of the revised NCCP (CAC, 2008). As such, this team chosen competed nationally and internationally in the sport of curling and was striving for sport excellence at the highest level (CAC).

The curling team involved a skip, a third (or vice-skip), a second, and a lead player (Canadian Curling Association [CCA], 2008). The athletes were aged between 18 and 20 years and they had been competing for at least eight years. The coach was 63 years old and had 25 years of coaching experience, at least 11 of which were at a national / international level.

The interactive nature of the sport chosen was important as studies have shown that sport type influences the magnitude of the cohesion-performance relationship. Specifically, when teams must work together in order to perform effectively, as they do in interactive sports, cohesion is a large determinant of success (Carron et al., 2005). It was believed that since this team was performing at an elite level, members would be dedicated to achieve excellence and would likely be committed to the self-regulation intervention, which has been shown to be necessary to reap any benefits from it (Arcand et al., 2007; Callary & Durand-Bush., 2008; Doell et al., 2006; Lussier-Ley & Durand-Bush, 2009; Wolfe, 2006) and presumably to enhance group processes and interactions.

During the recruitment stage, potential coaches were contacted via telephone, and the purpose of the study, as well as the commitment required, was outlined. Once a team was found who was interested in participating, the researcher made arrangements to meet with the coach and athletes in order to explain the study and the roles of the researcher and consultant guiding the intervention. At this time, information and consent forms were given out to the coach and athletes (see Appendices B & C, respectively) and signed by all team members.

Consultant

In line with the participatory worldview, the consultant was an active participant in this study (Creswell, 2000; Heron & Reason, 1997). She led the feel-based intervention and had the competencies to do so as a result of conducting extensive research on feel, resonance, and self-

regulation, teaching psychological skills training and counselling courses at both the undergraduate and graduate level, and consulting with elite athletes for over 15 years using a variety of skills and approaches including resonance/feel-based counselling. It is also noteworthy that the consultant had worked with this curling team the previous year and as such, had an established relationship with them, which enhanced the rapport and trust required in an intervention (Ivey & Ivey, 2007). Since the team failed to meet their performance goals the previous year, they wanted to continue working with the consultant throughout the year and attempt to enhance their cohesion and performance. They saw their participation in this research project as an excellent opportunity to document evolving team processes and to learn from them.

Researcher

The researcher was the final participant in this study (Creswell, 2007; Heron & Reason, 1997) who played dual roles; that of researcher and assistant consultant. Specifically, in addition to conducting all aspects of the research project, the researcher also helped to guide the intervention in which the consultant worked with the athletes and coach to help them develop self-regulation skills and enhance cohesion and performance using the RPM as a framework (Callary & Durand-Bush, 2008). As such, the researcher assisted the consultant when appropriate and necessary, leading some intervention sessions independently and supporting the consultant in numerous other sessions (see results section for intervention details). To this end, she underwent training prior to commencing the study. Specifically, she completed a graduate counselling course, in which she learned to form therapeutic relationships with clients and employ numerous counseling skills and approaches. She also completed a graduate research methods course as well as a qualitative data analysis course. She further increased her understanding of intervention-based research through discussions with other graduate students who had, or were conducting

resonance interventions. Moreover, she was able to draw upon the consulting experiences she gained from her internship with varsity athletes from Laurentian University during her undergraduate degree. Finally, her several years of experience as a National level team sport athlete served her well in this research with an elite curling team.

Data Collection

The data collection phase took place over the course of the team's competitive season, that is, 24 weeks. The study was divided into three phases: pre-intervention, intervention, and post-intervention. Throughout the course of the study, data collection took place at either the team's curling club or another convenient location so as to minimize disturbances to the team members' schedule.

Phase 1: Pre-intervention

Observation and field notes. The 4-week pre-intervention phase involved participant observation during practices and competitions. Observation is believed to be a fundamental component of research methods, as it allows the researcher to make note of non-verbal forms of communication such as body language and gestures, which add insight into the words and experiences of participants (Angrosino & Mays de Peres, 2000). During the observation period, data were collected through detailed field notes, which are a qualitative method of data collection that are "written more or less contemporaneously with the events, experiences and interactions they describe and recount" (Emerson, Fretz, & Shaw, 2001, p. 353). As such, field notes were a representation of observable events that were preserved for later use. The observing researcher was able to select the elements that seemed important or significant and make note of them, which provided detailed descriptions of "people, scenes and dialogue, as well as personal experiences and reactions" (Emerson et al., p. 353). In the present study, the researcher was

particularly interested in making note of group processes such as interpersonal interaction and communication, displays of feelings or emotions, indications of cohesion or lack thereof, as well as both team and individual performances during practices and competitions.

Individual interview with the coach. The researcher conducted an open-ended, semi-structured interview with the coach at the onset of this phase in order to determine his perceptions and experiences pertaining to coaching, the team's performance and cohesion, and felt experiences. The researcher explored any issues or questions the coach wanted to clarify or discuss prior to the intervention. Refer to Appendix D for the interview guide (pre-intervention and intervention). The audio-recorded interview lasted approximately 60 minutes, after which the procedures for the study were explained, including the logistics for subsequent individual and group interviews.

Phase 2: Intervention

During the intervention phase, the athletes and coach were guided through a 16-week learning process designed to increase their self-awareness and self-regulation with a particular focus on their felt experiences (Callary & Durand-Bush, 2008; Wolfe, 2006). The data collection methods employed during this phase were: (a) group intervention sessions that took the form of group interviews, (b) one-on-one sessions between the coach and the consultant and/or researcher, (c) optional one-on-one sessions between athletes and the consultant and/or researcher, (d) debrief sessions between the consultant and the researcher, and (e) continued participant observation by the consultant and/or researcher. Whenever possible, both the consultant and researcher would be present at all intervention sessions. However, since this was not always feasible, the researcher facilitated group and individual intervention sessions in the consultant's absence.

Group intervention sessions. Each of the eight group sessions were conducted approximately every second week over the course of the intervention period. They were audio-recorded for analysis and lasted roughly 90 minutes. For the most part, the group intervention sessions resembled a semi-structured, open-ended group interview, yet there was also room for unstructured discussion since resonance interventions are person-centered (Arcand et al., 2007). Throughout the intervention phase, participants were guided through a learning process, based on the phases of the RPM, in order to help them identify (a) how they individually and collectively wanted to feel, (b) how they could prepare to feel the way they wanted by aligning their thoughts and behaviours with their desired multidimensional felt experiences, (c) internal and external obstacles that interfered with their desired feel, and (d) how they could effectively respond to these obstacles by taking the time to revisit the way they wanted to feel (Arcand et al.; Callary & Durand-Bush, 2008; Newburg et al., 2002).

Questions were asked by the consultant and in some cases, the researcher as well, and the athletes and coach were invited to share their thoughts, feelings, actions, experiences, personal stories, in fact, anything relevant to their performance, cohesion, and the intervention. For example, questions included: How do you feel about being part of this team and sport? How do you individually and collectively want to feel? What words describe how you collectively feel during practices and games when you are performing and feeling your best? What impact do you each have on how the team feels? What allows you to feel the way you want, and why? What is the most challenging obstacle that you foresee in the upcoming season, and what can you do as a team in order to prepare for it? In the past, what strategies have been successful or unsuccessful at helping you achieve your desired individual and/or team feel? (See interview guide in Appendix D).

The sessions, which were based on the RPM, were experiential in nature. According to Martin (2000), the process of change is cognitive-experiential, meaning that in order to change behaviour or the way one feels, people must first experience it. In the feel-based intervention, the athletes and coach were encouraged to feel within themselves and within their environment and to try to experience harmony between their inner self and environment, that is, experience resonance (Newburg et al., 2002). The intervention followed a person-centered approach, meaning that the team members were viewed as the experts on their own lived experiences, whereas the consultant and researcher were merely experts on the resonance process (Martin). As such, with the help of the researcher, the consultant facilitated the intervention and encouraged the athletes and coach to fully engage in the learning process designed to enhance both their individual and collective awareness, and their ability to manage their felt experiences. Zimmerman's (2000) social-cognitive self-regulation model was used to complement the RPM and guide important self-regulatory processes throughout the intervention including self-observation, self-monitoring, and self-reflection, all of which were intended to increase self-awareness and self-control. It is believed that these regulatory processes permit individuals to collect and evaluate personal and environmental data (Callary & Durand-Bush, 2008; Simon & Durand-Bush, 2009) that they can then use to become or remain consciously aware of discrepancies between their current and desired self-states (e.g., how they want to feel, think, and behave), and then consciously choose to engage in actions to reduce these discrepancies (Carver & Scheier, 1981; Zimmerman).

Individual intervention sessions with the coach. Following six of the group sessions, a one-on-one session was held with the coach to probe, in greater detail, issues that were discussed during the group session or to allow him to provide additional insight in the athletes' absence.

Each session lasted 15 to 30 minutes and was audio-recorded for subsequent analysis. Issues that were addressed included dealing with the pressures of high performance coaching that prevented him from consistently feeling the way he wanted, increasing awareness of how the athletes felt, how cohesive they were, and how this affected their performance. Self-regulation strategies that could be applied in everyday situations to enhance his effectiveness as an elite coach were also discussed.

Optional individual intervention sessions with athletes. Throughout the intervention phase, the athletes were given the opportunity to participate in one-on-one intervention sessions with the consultant and/or researcher. These sessions were open-ended to address the specific needs of the athletes and were recorded via field notes and a tape recorder when appropriate. They lasted anywhere from 15 to 60 minutes and were conducted in person, over the telephone, or via email to accommodate the athletes' hectic schedule.

Debriefing sessions between the consultant and researcher. A final method that was used to collect data throughout the intervention phase was debriefing sessions between the consultant and researcher. These debriefing sessions provided the consultant and researcher with an opportunity to reflect on individual and group sessions, share their observations and create detailed field notes. As the researcher was responsible for the data collection process, this provided her with the greatest understanding of not only the experiences of the athletes and coach throughout the intervention process, but also those of the consultant.

Phase 3: Post-Intervention

In the post-intervention phase, the consultant and researcher removed themselves from the team for four weeks before a final questionnaire was emailed to them. The athletes and the coach were asked to respond to these questions via email, as scheduling constraints did not

permit the consultant and researcher to meet with the team as a whole. The reason for incorporating this final four-week phase was to give the team the opportunity to reflect on the entire season and intervention process before responding to final wrap-up questions.

The athletes and coach were asked to reflect on what they learned throughout the process and how their felt experiences affected team performance and cohesion. The initial questions that were posed in the pre-intervention phase were revisited to determine any change in perceptions and experiences. Questions included: (1) To what extent were you able to feel the way you wanted (a) at the beginning of the season, and (b) at the end of the season? (2) To what extent were you able to develop strategies that helped you regulate your thoughts, actions, and how you felt (a) at the beginning of the season, and (b) at the end of the season? (3) How did this intervention impact your performance and team cohesion? The participants were asked to respond to each of the questions using a seven-point Likert scale, and to explain and justify their answers in detail (see questionnaire in Appendix E).

Data Analysis

Interviews and Intervention Sessions

A narrative approach was fitting for the present study as it is a form of data analysis that enabled the researcher to provide a detailed account of the participants' interpretations of real life events (Sparkes & Partington, 2003), and permitted an evocative expression of their experiences (Denison, 1996). For the purpose of this study, both an analysis of narratives and a narrative analysis were used – the former was used to explore the content of the interview and intervention session data, whereas the latter was used to organize and present the data in a chronological manner to illustrate the process through which the team evolved (Polkinghorne, 1995).

According to Polkinghorne (1995), an analysis of narratives is a paradigmatic approach in which participants' experiences are organized according to pre-existing categories (i.e., a deductive approach) or as they emerge (i.e., an inductive approach). In the present study, all interview and intervention session data were transcribed verbatim and were subjected to an analysis of narratives in which the components of the RPM were used to structure the data, yet the analysis also allowed for the surfacing of new themes (e.g., team cohesion, athlete-coach relationships, etc.). This process facilitated the narrative analysis that led the researcher to present the participants' experiences in a logical and chronological manner while highlighting important themes that were either deductively or inductively derived (Polkinghorne; Sparkes, 2002).

Field Notes

The extensive field notes taken from regular participant observations and debriefings between the consultant and researcher were also analyzed and key themes were extracted (Bernard, 1988) and integrated into the chronological narrative presented in the results section. During the intervention, key themes from these field notes were also used to identify questions to be asked in subsequent group or individual intervention sessions to expand or clarify important issues that were noted (Callary & Durand-Bush, 2008).

Questionnaire

The post-intervention questionnaire consisted of a combination of 10 quantitative and qualitative questions (see Appendix E). Participants were asked to respond to each question using a seven-point Likert scale, differentiating between the beginning and the end of the season (e.g. To what extent was the team cohesive (a) at the beginning of the season? (b) at the end of the season?). They were then asked to explain / justify their response. The data were analyzed in

two ways. Firstly, quantitative scores from all five participants were entered into a data table and mean team scores were calculated for each question and sub-question; therefore both pre- and post-intervention mean scores were obtained for 8 of the 10 questions and were summarized in Figure 1. As such, the researcher was able to note perceived changes reported by the athletes and coach as a result of their participation in the intervention. Secondly, a content analysis was conducted to analyze the qualitative data (e.g., Please explain your response); an inductive search was carried out in order to identify key themes (Bernard, 1988). This post-intervention data was synthesized and integrated into a specific section at the end of the narrative (Polkinghorne, 1995).

Trustworthiness

One criticism of the case study methodology pertains to the trustworthiness of the results. Thus, in order to ensure that the results of the present study were as trustworthy as possible, triangulation was performed by using multiple methods of data collection (Tellis, 1997b), specifically, individual and group interviews/sessions, participant observations and debriefings between the consultant and researcher that led to extensive field notes, and a questionnaire. By using multiple sources of data, the accuracy of the findings was increased and there was ample opportunity to explore and present various potential explanations for the results.

The accuracy of the results and interpretations was also ensured by having the athletes, coach, and consultant verify the constructed narrative (Callary & Durand-Bush, 2008; Polkinghorne, 1995). The latter was emailed to them so that they could provide the researcher with feedback regarding the accuracy of the story, and in some cases, very minor changes were made in order to better represent their interpretation of reality or remove pieces of information that they wished to keep confidential. A final trustworthiness procedure used in this study was

ongoing peer debriefing to remain as transparent and accurate as possible throughout the data collection and analysis phases (Spall, 1998).

CHAPTER IV

Results and Discussion

The results of this thesis are presented in the form of a scholarly article titled “Enhancing the Cohesion and Performance of an Elite Curling Team Through a Self-Regulation Intervention” This article will be submitted to the International Journal of Sports Sciences and Coaching (IJSSC).

Running head: Self-Regulation of a Sport Team

Enhancing the Cohesion and Performance of an Elite Curling Team Through a Self-Regulation
Intervention

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September 2009

Abstract

In team sport settings, the ability to self-regulate is associated with enhanced teamwork and performance (Bell, 2007). However, little research has focused on the self-regulation of sport teams (Callary & Durand-Bush, 2008; Wylleman, 2000). As such, the purpose of the study was to document if and how an elite curling team comprised of four female athletes and one male coach could enhance their cohesion and performance by engaging in a 16-week learning process designed to help them self-regulate, particularly, their felt experiences. Multiple data collection methods included individual and group interviews, participant observation, and a questionnaire. Results reveal the process through which the four athletes and coach learned to increase their self-awareness and develop regulatory strategies to individually and collectively feel, think, and behave the way they wanted. Although they faced several obstacles throughout the season, both the coach and athletes reported increased performance and cohesion as a result of the self-regulatory intervention.

Enhancing the Cohesion and Performance of an Elite Curling Team Through
a Self-Regulation Intervention

Self-Regulation of Feel, Performance, and Team Cohesion

Little research has explored the ways in which team sport athletes and coaches regulate themselves (Callary & Durand-Bush, 2008; Wylleman, 2000). Defined as “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals” (Zimmerman, 2000, p. 14), the process of self-regulation has been associated with enhanced learning and performance (Pololi, Frankel, Clay, & Jobe, 2001; Schutz & Davis, 2000; Zimmerman). However, a limitation of the self-regulation literature is the lack of specific strategies to help people develop self-regulatory skills (Schunk & Ertmer, 2000). As we know, groups are dynamic and they must be able to manage themselves (Dunn & Holt, 2004; Jowett & Wylleman, 2005) as several factors, including cohesion, can change and affect group members over time and across different circumstances (Eys, Burke, Carron, & Dennis, 2006). Although research clearly indicates that fundamental team elements, such as cohesion, affect team performance and functioning (Carron, Hausenblas, & Eys, 2005; Eys et al.), few studies have explored the ways in which cohesion may be developed and nurtured within team sport settings. Consequently, applied interventions designed to enhance the self-regulation and cohesion of teams are warranted.

One group of researchers has conducted intervention-based research on the self-regulation of athletes using the Resonance Performance Model (RPM, Callary & Durand-Bush, 2008, adapted from Newburg Kimiciek, Durand-Bush, & Doell, 2002). One important aspect of this research is the concept of feel that is central to the self-regulation process (Arcand, Durand-Bush, & Miall, 2007; Burke & Durand-Bush, 2009; Callary & Durand-Bush; Doell, Durand-

Bush, & Newburg, 2006; Lussier-Ley & Durand-Bush, 2009; Simon & Durand-Bush, 2009; Wolfe, 2006). Feel, in this context, was defined as a holistic, subjective, multidimensional experience mediated by one's ability to perceive, to be aware of, or to be conscious of one's inner self and environment (Myriam-Webster Dictionary, 2008). As such, the concept of feel, studied from a slightly different yet innovative vantage point, was differentiated from traditional definitions of feelings and emotions (Denzin, 1984; Hansen, 2005; Vallerand & Blanchard, 2000) because in addition to an emotional dimension (e.g., I feel content), it also encompassed physical (e.g., I feel strong), cognitive (e.g., I feel confident), social (e.g., I feel connected to the group) and spiritual (e.g., I feel at peace) facets. It was found that one's ability to feel and overall felt experiences can change over time as a result of increased self-awareness, learning, and self-regulation (Arcand et al.; Callary & Durand-Bush; Doell et al.; Lussier-Ley & Durand-Bush; Simon & Durand-Bush).

Another feature of Durand-Bush and colleagues' research is the RPM, which was used to guide the feel-based interventions. The RPM represents a self-regulatory process of felt experiences, termed resonance (Callary & Durand-Bush, 2008). Resonance is based on the assumption that when people find meaning and engage in their daily activities by consciously choosing to act in ways that allow them to feel the way they want (i.e., in line with their preferred standards, Vohs & Baumeister, 2004), their experiences and performance will be enhanced (Newburg et al., 2002). Thus, resonance is the process in which people exercise control over themselves to have a seamless fit between their internal self and external environment (Newburg et al.; Vohs & Baumeister) by adapting to personal, behavioural, and environmental factors that are constantly changing (Zimmerman, 2000).

The RPM consists of four components: The Way You Want To Feel, Preparation, Obstacles, and Revisit The Way You Want To Feel (Callary & Durand-Bush, 2008).

(Insert Figure 1 here)

The Way You Want To Feel is self-explanatory and refers to the way one wants to feel from a multidimensional perspective when engaging in a given activity or situation; it is the internal experience that drives participation (Newburg et al., 2002) that may be accessed by examining and contrasting best and worst experiences and performances in a given life domain (i.e., sport, school, work). Thus, in the resonance process, it is not simply a desired outcome that guides the achievement of goals (Shutz & Davis, 2000) but largely the way one wants to feel to be able to sustain motivation and engagement. The Preparation component involves preparing to feel the way one wants by developing strategies that can be physical (e.g., exercise), cognitive (e.g., engage in positive self-talk), technical (e.g., practice a drill), tactical (e.g., review the game plan), social (e.g., call a friend), and/or organizational (e.g., structure activities using an agenda) (Arcand et al., 2007; Doell et al., 2006). These regulatory strategies are context and situation specific, as self-regulating individuals must constantly adapt to varying conditions (Zimmerman, 2000); thus one strategy may work for one individual but not another, or it may lose its effectiveness for the same individual over time. Individuals must apply a desired strategy, often more than once, and determine if it allows them to experience their desired feel while achieving their learning or performing goals.

The Obstacles component of the RPM acknowledges that despite efforts, people will inevitably encounter internal (e.g., anxiety) and external (e.g., interpersonal conflict) obstacles that prevent them from feeling the way they want. The resonance process allows individuals to identify current obstacles as well as anticipate others based on past and upcoming new

experiences in order to develop appropriate responses to them. To avoid losing sight of their desired feel, they learn to revisit the way they want to feel before returning to more preparation (Callary & Durand-Bush, 2008). Thus the final component of the RPM, Revisit The Way You Want To Feel, involves reconnecting with the internal motives and feelings that drive participation in an activity. Just like in the preparation component, strategies are context and situation specific and can be physical, cognitive, technical, tactical, social, or organizational in nature (Arcand et al., 2007; Doell et al., 2006; Newburg et al., 2002).

Research with over 50 athletes from different *individual* sports, gender, age, and levels of competition has demonstrated that athletes can learn to control themselves and the way they feel by participating in a feel-based self-regulation intervention (Arcand et al., 2007; Doell et al., 2006). However, it was unclear if *team* sport athletes could do the same. Consequently, three recent studies explored if and how team sport athletes could regulate the way they feel, both individually and collectively, by engaging in an extensive group intervention (Callary & Durand-Bush, 2008; Lussier-Ley & Durand-Bush, 2009; Wolfe, 2006). Congruent with the notion that the ability to self-regulate is influenced by the presence of others (Zimmerman, 2000), it was found that these three groups of individuals could learn to self-regulate to bring themselves into line with their preferred standards (Vohs & Baumeister, 2004) in an attempt to enhance their performance and well-being. The primary processes allowing them to do this were group and individual interviews facilitated by the researcher guiding the intervention, ongoing observations of the self and others, and personal reflections (Callary & Durand-Bush; Lussier-Ley & Durand-Bush; Wolfe).

Of interest, a limitation of Lussier-Ley and Durand-Bush's (2009) study with modern dancers was that the group intervention did not involve their teachers. However, as reported by

these authors and several other researchers, coaches or teachers significantly influence the experiences and performance of athletes, including their perceptions of success and failure, their motivation, and how they feel (Callary & Durand-Bush, 2008; Durand-Bush & Salmela, 2002; Ewing, Seefeldt, & Brown, 1996; Feltz & Lirgg, 2001; Salminen & Liukkonen, 1996; Simon & Durand-Bush, 2009; Wolfe, 2006;). As a result, Callary and Durand-Bush included the athletes' male coach in the group intervention they conducted with 16 female varsity volleyball players to shed light on his role in the self-regulation process. Results showed that through the intervention, both the experienced coach and the athletes increased their awareness and developed self-regulatory skills to control their desired feel, thoughts, and actions associated with optimal experiences and performance. Both the coach and the researcher/consultant played an instrumental role in facilitating the resonance process.

In Wolfe's (2006) study, a self-regulation intervention was also conducted with both the athletes and the coach. The most significant finding emerging from this investigation was that developing self-regulation skills requires ongoing commitment, trust, and engagement in the learning process from both the coach and the athletes. The intervention with this team of 16 varsity synchronized swimmers and less experienced female coach served to help them attempt to resolve ongoing tension and conflict. It became a forum for them to increase their awareness of various obstacles and undesired feelings, and communicate to try to find solutions.

Interestingly, results of the three aforementioned studies show that both coaches and athletes can facilitate self-regulation yet they can also hinder it when they are perceived as obstacles and create a discrepancy between an individual's current and desired states (Callary & Durand-Bush, 2008; Lussier-Ley & Durand-Bush, 2009; Wolfe, 2006). There certainly is merit in involving both athletes and coaches into self-regulation interventions with teams as well as

focusing on other important related processes such as cohesion and communication development because in a team context, performance and overall functioning are largely affected by cohesion (Carron et al., 2005; Carron, Colman, Wheeler, & Stevens, 2002; Eys et al., 2006).

Although much research has been conducted on cohesion, little is actually known about the day-to-day processes through which teams can develop and maintain this important element of performance (Dunn & Holt, 2004; Jowett & Wylleman, 2005). According to Eys and colleagues (2006), there are many correlates of cohesion, each of which can be divided into four categories: environmental, personal, leadership, and team factors. The relationship between these correlates of cohesion is believed to be cyclical in nature, much like the cohesion-performance relationship (Carron et al., 2005; Eys et al.). Thus, it can be assumed that when structuring applied interventions aimed at enhancing team cohesion and performance, such factors should be targeted. Examined more closely, these correlates suggest that cohesion may be enhanced by creating a team environment of physical proximity, as this allows team members greater opportunities to interact and communicate task and social issues (Eys et al.). By bringing teammates closer together, there is a greater likelihood that they will develop similar cognitions (i.e., attitudes, beliefs, and motives), share responsibility for negative outcomes, and make sacrifices for the sake of the team. Based on the literature, it also appears as though interventions that nurture positive leadership behaviour may also enhance team unity by fostering a supportive environment in which athletes receive positive feedback, participate in decision-making, and are clear about their role on the team (Carron et al., 2005).

Clearly, research has highlighted the importance of cohesion in team sports yet despite the vast amount of literature available on the subject, few applied interventions have been implemented and studied. One intervention study, however, examined the effects of a personal-

disclosure mutual-sharing team building intervention that aimed to create an environment of mutual understanding and shared cognition (Dunn & Holt, 2004). Results revealed that when asked to share personal experiences (i.e., thoughts, feelings, and ideas) with team members, athletes perceived an increased understanding of the self and others, and improved cohesion. This suggests that when communication is increased and teammates are asked to share personally meaningful stories, similar to those shared during a group resonance intervention for example (Callary & Durand-Bush, 2008; Lussier-Ley & Durand-Bush, 2009; Wolfe, 2006), athletes are likely to perceive an increased individual and collective awareness and sense of team unity. Based on the cohesion-performance relationship (Carron et al., 2002), this could also lead to enhanced performance.

In summary, based on the literature discussed, it is apparent that research involving team sport athletes and coaches that is focused on self-regulation interventions and strategies designed to enhance team functioning, relationships, and cohesion is warranted. Based on data from three resonance intervention studies conducted with groups (Callary & Durand-Bush, 2008; Lussier-Ley & Durand-Bush, 2009; Wolfe, 2006), it is believed that a team feel-based self-regulation intervention involving both athletes and coaches could be an approach leading to increased cohesion and performance.

The purpose of the present study was to document if and how an elite curling team comprised of four female athletes and one male coach could enhance their cohesion and performance by engaging in a learning process designed to help them self-regulate, particularly, their felt experiences. Following were the specific research questions: By participating in a team feel-driven intervention facilitated by a consultant and researcher and guided by the RPM (Callary & Durand-Bush, 2008), how can four athletes and their coach help themselves and each

other to (a) feel the way they want, (b) prepare to feel the way they want, (c) anticipate and overcome obstacles that get in the way of their desired feel, (d) reconnect with how they want to feel when necessary, and (e) optimize their performance and cohesion? It was hypothesized that if the athletes and coach could feel better about themselves on a more consistent basis as a result of regulating their felt experiences and consciously choosing to engage in activities based on team interests, goals, and desired felt experiences, the team's cohesion and performance would not only be enhanced, but would be more sustainable over time.

Methodology

This study was based on a participatory paradigm of which the goal is to promote change and foster feelings of personal empowerment (Creswell, 2007). A participatory process is collaborative, involving both the researcher and the participant. In essence, it is believed that exploration of the self is achieved and reality is created with or in the presence of others (Creswell; Heron & Reason, 1997). Consistent with the participatory paradigm, the RPM used to guide feel-based interventions placed an emphasis on participants' lived experiences and acknowledged the influence of the social context (i.e., the environment, the team, the consultant, and the researcher). Essentially, participants were able to make sense of their reality by participating with the objects and events in their world, and interacting with one another (Heron & Reason). For this reason, the experiences of each team member were considered to be unique and were documented over the course of the intervention by conducting a multiple-case study (Yin, 2003).

Case studies are defined as "an empirical inquiry that...investigates a contemporary phenomenon within its real-life context, especially when...the boundaries between phenomenon and context are not clearly evident" (Yin, 2003, p. 13). Researchers using case studies are

interested not only in individual experiences with particular events, but also with the conditions in which they occur (Yin, 2003), such as a team-sport environment. Accordingly, this methodology is consistent with the aim of the present study to document individual and team felt experiences, or the real life processes of each athlete and coach. This study examined several phenomena (Yin, 1994), specifically feel, resonance, performance, and cohesion within the context of an elite sport team. The multiple-case, unlike the individual-case, study approach led to the examination of both the common experiences and individual differences of the participants (Yin, 2003).

Participants

Participants were members of an elite female curling team (N=4, skip, third or vice-skip, second, and lead) and a male coach. Each athlete was between 18 and 20 years of age and had been competing in the sport for a minimum of eight years. The elite coach, who was 63 years of age, had been coaching the team for over eight years and also previously coached other teams at an international level. For the purpose of this study, elite was defined as a team competing nationally and/or internationally in the sport of curling. The curling team was selected not only based on the members' willingness to participate, but also based on the nature of their sport. Since the cohesion-performance relationship has been shown to be strongest in interactive sports (Carron et al., 2005) involving high task interdependence (Gulley, Divine, & Whitney, 1995), it was believed that cohesion would be a large determinant of success on this team.

During the recruitment stage, potential coaches were contacted via telephone, and the purpose of the study, as well as the commitment required, was outlined. Once a team demonstrated interest in participating, the researcher made arrangements to meet with the coach

and the athletes in order to explain the study. At this time, information and consent forms were provided and signed by all team members.

Based on the participatory paradigm (Creswell, 2007), the two other participants were the researcher (lead author) who was conducting her Master's thesis and the consultant (second author). The consultant led the intervention phase, which consisted of working with the athletes and coach to help them develop self-regulation skills and enhance cohesion and performance using the RPM as a framework (Callary & Durand-Bush, 2008). She was adequately prepared to lead the feel-based self-regulation intervention after conducting research on the topics of feel, resonance, and self-regulation for several years, teaching psychological skills training and counselling courses at both the undergraduate and graduate level, and consulting with elite athletes for over 15 years using a variety of skills and approaches including that of resonance/feel-based counselling.

The researcher was responsible for conducting the project across the pre-intervention, intervention, and post-intervention phases. She also played a secondary role in the intervention phase whereby she assisted the consultant when appropriate and necessary, leading some intervention sessions independently and supporting the consultant in others. The researcher was adequately prepared to facilitate some intervention sessions as a result of taking a counselling course in which she mastered several skills and approaches including those pertaining to resonance/feel-based counselling. As a national level athlete in a team sport, the researcher also had a thorough understanding of team processes including cohesion and communication.

Data Collection

The data collection phase took place over the course of the teams' six month (24-week) competitive season, and was divided into three phases: pre-intervention, intervention, and post-intervention phases (see Table 1 for a description of each phase and its objectives).

The data emerged from the following data collection means: (a) Multiple individual interviews/intervention sessions with the coach and athletes that were conducted at practices, competitions, and different off-site locations. These interviews/intervention sessions were at times guided (Patton, 2002) and in other instances, they took the form of informal conversations that lasted anywhere from 15 to 90 minutes; (b) The eight group feel-driven intervention sessions, which were for the most part pre-determined and guided by the RPM; however, some were spontaneously led at competitions based on the athletes' and coach's needs and requests. Sessions lasted approximately 90 minutes; (c) Observations of verbal and non-verbal communication and interactions amongst team members during several practices, competitions, including provincial and national championships, and off-site team meetings over the six-month period led to rich contextual data that were captured in extensive field notes; (d) Regular debriefing sessions between the consultant and the researcher to discuss their perceptions of the intervention, their observations, and interpretations, which were captured in field notes; and (e) A final questionnaire that was administered at the end of the post-intervention phase to capture final overall reflections regarding the self-regulation intervention and its perceived impact on team cohesion and performance.

Data Analysis

The use of a narrative approach to analyze the data was fitting for the present study as it enabled the researcher to provide a detailed account and understanding of the participants'

interpretations of events (Sparkes & Partington, 2003) and permitted an evocative expression (Denison, 1996) of the elite athletes' and coach's experiences. The tape-recorded interviews and intervention sessions were transcribed verbatim and compiled to form a chronological narrative after which both an analysis of narratives and a narrative analysis were performed (Polkinghorne, 1995). The former was used to explore the content of the data. Specifically, this approach was used to deductively organize the data into pre-determined themes (e.g., based on RPM components) yet it also allowed for the emergence of new themes through an inductive approach (e.g., team cohesion, coach-athlete relationships, etc.) A narrative analysis, on the other hand, was used to organize and present the extensive data and key themes in a chronological manner to illustrate the ways in which the team's experiences pertaining to self-regulation, performance, and cohesion evolved throughout the study (Polkinghorne). Field notes were also analyzed and key themes and data were integrated into the overall narrative in order to compliment the interview and intervention session data.

The post-intervention questionnaire consisted of a combination of 10 quantitative and qualitative questions (see Appendix E). Participants were asked to respond to each question using a 7-point Likert scale, differentiating between the beginning and the end of the season (e.g. To what extent was the team cohesive (a) at the beginning of the season? (b) at the end of the season?). They were then asked to explain / justify their response. The data were analyzed in two ways. Firstly, quantitative scores from all five participants were entered into a data table and mean team scores were calculated for each question and sub-question; therefore both pre- and post-intervention mean scores were obtained for 8 of the 10 questions and were summarized in Figure 1. As such, the researcher was able to note perceived changes reported by the athletes and coach as a result of their participation in the intervention. Secondly, a content analysis was

conducted to analyze the qualitative data (e.g., Please explain your response); an inductive search was carried out in order to identify key themes (Bernard, 1988). The post-intervention data was synthesized and integrated into a specific section at the end of the narrative (Polkinghorne, 1995).

Trustworthiness

To ensure that the results of the present study were as trustworthy as possible, triangulation through the use of multiple methods of data collection was used (Tellis, 1997). Furthermore, by having the athletes and coach authenticate the constructed narrative and by making the minor recommended changes, the accuracy of the results and interpretations was enhanced (Callary & Durand-Bush, 2008; Polkinghorne, 1995). A final trustworthiness procedure was ongoing peer debriefing to remain as transparent and accurate as possible throughout the data collection and analysis phases (Spall, 1998).

Results and Discussion

The following results are presented as a chronological story depicting the intervention process and the lived experiences of the participants throughout the 24-week study. In relation to the purpose of this study, the team's felt experiences and ability to regulate them in the face of cohesion and communication demands and challenges are highlighted throughout the storied narrative. It is noteworthy that the results are linked to the literature as the narrative unfolds to effectively and efficiently attempt to discuss and explain the process and the participants' experiences and interpretations.

The Beginning – The Team

When the consultant and researcher met with the team, it was evident that each member was unique. The coach, former three-time Provincial Champion and World Junior Champion

coach, had been working with the athletes for over eight years. As a result, he had built a strong bond with each of the team members and had a good understanding of their strengths and weaknesses. The coach reported that his coaching philosophy was athlete-centered and he was willing to do what was necessary to help each athlete play and feel her best. He aimed to develop a caring and trusting relationship with the team, which he believed fostered personal growth, cohesion, and independence.

According to the coach, the skip was a “strong willed” and intense player who had ambitions of curling at the Olympic level. From a shot-making perspective, the coach described her as being among the best in the world. On a personal level, she was very passionate, however, she also had a tendency to “go into a shell” when she was not pleased with her individual or team performance. The vice-skip was an outspoken and confident player. The coach noted that her confidence fuelled her teammates during competition, and in terms of game strategy, she was a strong compliment to the skip. However, the vice-skip sometimes had difficulty accepting responsibility for performance errors. The second was described by the coach as a very “steady, calm, and quiet player” who never caused problems for the group as she enjoyed being a member of the team, yet she was known to suffer occasionally from low self-confidence. The lead, alternatively, was more of a “free spirit” and a “social butterfly.” From the coach’s perspective, her personality served the team well in that she was neutral and her humour often helped dissolve tense issues. Sometimes, however, her extraversion and free-thinking caused her to lose on-ice focus during games.

The team had been competing together for eight years, with only one line-up change in the seventh year when the current lead joined the team. Thus, at the onset of the study, strong

relationships had already been formed among the athletes and coach. It was clear that all team members had a close connection with one another.

Intervention Session 1 – We Need Our Coach

The first intervention session only involved the four athletes as the coach was out of town. It took place following a Junior International Superspiel, with which they were not pleased with their performance. The team shared that they were “out of tolerance.” When the athletes referred to themselves as being out of tolerance, it meant that when they missed shots, they failed to put themselves in a position that allowed them to achieve the next best option. They claimed that this problem had little to do with skill or strategy, but rather was mental: “Obviously I’m still focused, but maybe I wasn’t quite as focused as I could’ve been when I was playing”

(Athlete 1). Athlete 3 responded:

I think we also felt a little more pressure because when we go into women’s events, we don’t feel [it] because we’re still young and we’re not expected to beat all these teams, but at the junior level we have such a reputation that...we felt we had to prove [ourselves].

Two of the athletes acknowledged that having such expectations had the potential to affect their focus as they pulled their attention away from the present moment.

The consultant noticed that the skip was unusually quiet and did not appear to agree with the others’ views. When asked to share her thoughts, she challenged her teammates by saying:

It’s not different if we play Women’s or Juniors. [The Junior teams are]...the same caliber as the Women’s teams.... [They] are all National teams, so they could probably beat any women’s team on any given day, so I don’t see a difference. Just because they’re younger doesn’t mean they’re bad...I was trying to play my best. – Athlete 4

The skip felt that their sub-optimal performance was not due to the pressure, but due to the recent lack of technical coaching. As this appeared to be an issue that was affecting each member of the team, the consultant decided to further explore how they felt about the coaching and made a note to address their tendency to place additional pressure on themselves in a subsequent session.

The athletes explained that the coach had been absent for several tournaments and they questioned his commitment to the team. It was evident that each of the athletes felt frustrated and discouraged by the lack of feedback and instruction they were receiving; “Our technical skills are slipping” (Athlete 3). When asked if his commitment was something that they wanted to address, one athlete was concerned that the coach could threaten to quit if they were to confront him. They did not appear to be comfortable discussing this with the coach; however, the consultant was concerned that this issue was going to affect them not only during his absence, but also upon his return. She reminded them that if they were not satisfied with their relationship with the coach, then it could ultimately affect their performance. As found by Jowett and Cockerill (2003), successful athlete-coach relationships are characterized as collaborative, supportive, emotionally close, and highly committed, and literature suggests that the absence of such characteristics has negative consequences for performance. The consultant was also aware that at an elite level, coach feedback and availability have been shown to positively influence performance, whereas a lack thereof can have a negative impact (Greenleaf, Gould, & Dieffenbach, 2001). The athletes agreed so they discussed how they could improve the situation.

Based on the athletes’ input, it was decided that the consultant would email the coach to inform him that as planned, they had debriefed the team’s weekend performance. The purpose of the email would not be to confront the coach, but rather to indicate that the athletes were dissatisfied with their performance, and that with some feedback and “expert eyes” to help adjust

their technique, they could improve. The consultant reassured the athletes by reminding them that such issues could be addressed effectively with proper communication skills. She reiterated that what was important was *how* they addressed the issue.

The athletes asked the consultant if she could attend the team's next tournament to provide feedback on their non-verbal behaviour: "We just need feedback of any kind...We're all really stressed out right now with school and stuff, and it would be good to remind everybody [to be positive]" (Athlete 4). By the time the athletes left the session, the mood was lighter and they felt better; they were more energized and were joking around, after which one athlete said, "Thanks for the amazing team meeting." It appeared as though by voicing their concerns and coming up with a team strategy to address their coach's absence, a weight had been lifted from their shoulders. Much in line with Callary and Durand-Bush's (2008) study, the athletes seemed to benefit from having a session with the consultant who was able to help them by providing personal attention and support, as well as by discussing coping skills and creating a solution-focused environment conducive to self-growth and learning (Gould, Dieffenbach, & Moffett, 2002), and self-regulation (Zimmerman, 2000).

As planned, the consultant emailed the coach after the meeting to address the athletes' need for technical support. The coach, who had been working outside of the country, responded positively: "I certainly feel like I have neglected the girls because of my commitment [to another team] and now I'm back and ready to give them the priority they deserve." Addressing the aforementioned issue highlighted the importance of communication amongst team members and the potential difficulties inherent in the process. Gould, Murphy, Tammen, and May (1991) found that according to athletes and coaches, one of the most important ways a consultant can be effective when working with elite teams is by improving interpersonal athlete-coach

communication. Since team members often have difficulty recognizing their own areas of weaknesses (Beauchamp, Maclachlan, & Lothian, 2005) and there is typically a relation of power between coaches and athletes, it seems logical that there be a need for someone, such as a consultant, to facilitate effective communication within sports teams (Callary & Durand-Bush, 2008; Wolfe 2006).

Intervention Session 2 – Let's Communicate and Stay Positive

The athletes met with the researcher a week later to reflect upon their recent bonspiel and prepare for an upcoming competition. Neither the coach nor the consultant was present for this session. The team, who got to the final, was pleased with the outcome of the bonspiel and noted that, in contrast to their last Superspiel, they were more “in tolerance; ...more mentally tough” (Athlete 3). Despite their perceived success, the athletes still felt that they could have performed better, which is not uncommon of elite athletes who are constantly looking to perfect themselves and have high personal expectations (Gould et al., 2002). It was acknowledged that at times, the players assumed that their teammates knew where the rock could and could not go, but that it was not always the case. As a result, Athlete 1 felt that they could better communicate the tolerance. Each member committed to increase communication regarding shots during the next competition as by doing so, it was felt that fewer shots would be missed thus reducing their level of frustration.

Communication was again a key issue within this team setting. The importance of on-ice communication regarding technical aspects of the game that was shared by the athletes in this session supports the literature on team coordination (Eccles & Tenenbaum, 2004). In order to maximize group productivity, team members must be able to communicate the team plan through verbal and non-verbal behaviour. Initially, in order to coordinate their responses, team members

need to engage in intentional communication, however, as shared knowledge increases, members can begin to accurately interpret task information in order to select the appropriate response and coordinate team functioning (Eccles & Tenenbaum). It was believed that the curlers still needed to increase task-related communication in order to minimize process losses caused by ineffective coordination.

The discussion during the intervention session turned to the upcoming tournament, for which the coach was unable to be present. Going into the weekend, the athletes shared their desired feel; they wanted to feel positive, confident, and well rested but lately, they were finding it difficult to feel this way; “It’s hard to be positive when we’re missing shots” (Athlete 4).

Athlete 2 made reference to how she felt when missed shots resulted in negativity:

[I do not feel] so bad if it’s myself, because it’s just self-blame. If it’s someone else doing it then it’s just unnecessary and I wish they would stop doing that; it kind of puts you in a bad frame of mind. But in my head, I figure that I guess it’s understandable because that shot sucked. You justify it and get over it, I guess.

Athlete 1 noted that when a teammate was negative about another player’s shot, the team rarely addressed it for fear of upsetting one another. When the researcher asked how this affected the team’s performance, this strategy was deemed ineffective as issues were never dealt with and thus became magnified.

A game plan was discussed for situations in which the athletes got down on themselves or others as it was thought that if they could minimize the negative feelings that ensued by applying regulatory strategies, their performance and group dynamics would not suffer as much.

Athlete 3 felt that the best strategy for such situations was to be strategically conservative and “chip away” at the scoreboard:

[It's important to] make sure you score the next end....that way you're still catching up gradually. There is no need to panic. So if we can get the mental, the bad, out of our head and just do that, then that could really help us.

She continued by saying that if, in such situations, the team could remain positive and regroup, then they would likely feel more "motivated to make [their] shot because you want to help your team get back in the game." Athlete 4 agreed yet acknowledged that this was not something that the team did on a consistent basis. The idea that the team would be more motivated if they were better able to remain united is consistent with cohesion literature. Researchers have demonstrated that when teams are cohesive, they are more likely to make sacrifices for the sake of the team (Prapavessis & Carron, 1997a), as well as produce a greater individual work output (Prapavessis & Carron, 1997b) than less cohesive teams, thus contributing to a more optimal performance.

Communication appeared to have a large impact on not only on-ice performance but also how the athletes generally felt individually and collectively, as one athlete mentioned that she felt "scared" when her teammates stopped talking. However, it was brought up that it was extremely hard to communicate and remain positive when feeling angry as a result of poor performance. Athlete 3 responded to this by saying, "Yah, I don't know what we can say. But the not talking thing really phases me; it puts me off my game." As a result, the curlers needed to make an effort to enhance positive communication in the face of obstacles. Determining ways in which they could support one another proved to be more difficult than expected, as each athlete differed with regards to what they believed would help or hinder their performance. In the end, the athletes became more aware of their individual needs to feel supported, which the researcher

hoped would help them communicate more effectively with one another. The athletes believed that this collective feeling of support would lead to enhanced performance during difficult bouts:

When you're missing your shots, you're trying to focus more in the next end. You're just feeling more pressure because you feel like everyone else on the team is mad at you. So you feel more pressure in the next end to make your shot to please everyone else. If you knew your team was supporting you instead of being mad at you, it would be a lot easier to make your shot. – Athlete 3

Athlete 4 expressed her reasons for becoming frustrated with her teammates in the hopes that it would help them understand why she often became silent when the game was going poorly: “When I get frustrated, I don't get mad at people, I just get frustrated at the situation. Because the more we miss, the more I know there's pressure on me to make a really good shot.” Despite this, the skip also recognized that when she responded this way, it was detrimental to the team. In line with Beauchamp and colleagues' (2005) findings, the researcher felt that if the athletes could develop a greater individual and collective awareness, they would be more able to effectively adapt their methods of communication in order to enhance group functioning and remain united. As such, each athlete needed to become more aware of their own responses to frustration, how these responses affected their teammates, and how they could help each other feel the way they wanted so that they could perform at their best. In essence, communication was crucial as the athletes could not respond to one another's needs or feelings unless they first became aware of what they were by sharing them (Dunn & Holt, 2006; Orlick, 1990).

One week after this session, one of the athletes emailed the consultant to express her concerns. It appeared as though the team was still disconnecting when errors were made during games, which created a tense atmosphere on the ice. She also expressed frustration with the

team's lack of accountability for mistakes made, and acknowledged that it was negatively impacting her sport enjoyment: "I've been trying to ignore it all season but it's getting really hard and anytime we start losing a game, I stop enjoying curling in general." Clearly, the team was having difficulty regulating their felt experiences and responses to them, both individually and collectively, thus the consultant wanted to explore these issues further in the subsequent session.

Intervention Session 3 – We're Not Feeling Together

During the next session in which the coach, athletes, consultant, and researcher were present, the athletes were asked to describe ideal team dynamics. The team addressed the importance of task cohesion (Carron et al., 2002) when saying, "It's sticking together through the whole game, no matter what the outcome – no matter what goes wrong, what goes right" (Athlete 3). However, it was clear that the team was not consistently achieving their desired feel, that is, a feeling of togetherness as Athlete 2 mentioned that there was "definite room for improvement."

The consultant had sensed for some time that the team was not feeling optimally, as issues relating to team dynamics discussed in earlier sessions were still apparent – the athletes were visibly separating on the ice when mistakes were made, they often appeared to be angry with one another, and she could feel the tension within the group. Thus, she wanted to explore what was happening and how they felt. While Athlete 2 mentioned that there had been a great deal of negative behaviour, Athlete 1 expanded by saying, "We do a lot of unnecessary stuff...on the ice dynamics wise. It's not necessary for us to get mad at each other...we can express that in another way." This left the players feeling stressed, angry and agitated, and took the fun out of competition. Athlete 4, however, insisted that she did not take it personally when people got mad

at themselves or one another on the ice, as long as no one said anything that would get her off of her game.

The consultant responded by asking, “Is it fair to say that what you say, when you say it, and how you say it is important because you’re sensitive to each other? It comes down to communication. You need to communicate, and you have to do it in a way that respects the other, and doesn’t get people feeling badly.” The conflicting nature of each individual’s thoughts, feelings, and behaviors seemed to act as a barrier to effective communication (Beauchamp et al., 2005) and self-regulation (Zimmerman, 2000). Thus, as in the previous session, the consultant encouraged the athletes to become more aware of how their verbal and non-verbal behaviour affected each other, particularly when they were upset with themselves because of missed shots. As team members were not always consciously aware of their effect on one another, the consultant and researcher played a key role throughout the intervention by observing the athletes’ reactions to events and sensing the way that each team member felt in response (Martin, 2000). By doing so, they were able to effectively initiate conversations aimed at addressing difficult issues.

While Athlete 4 acknowledged that her behaviour could affect her teammates, it was clear that she had difficulty regulating it in order to minimize potential negative interpersonal consequences. Athlete 3 tried to increase the skip’s awareness of how her actions affected the team by saying:

You say [that] you get mad at yourself, and I understand if you’re mad at yourself about your [missed] shots, but there are times when you’ve turned your back on our shots before they get to the hog line. [It’s] that sort of stuff that shows that you’re not just mad at yourself.

The skip's behaviour had a considerable impact on the team because she was the leader, and as such, her teammates regularly looked to her for guidance and support. Unfortunately, in support of the literature, three of the athletes felt that there was a level of incongruence between their actual and preferred behaviour from their leader, which hindered their satisfaction, performance (Carron et al., 2005) and cohesiveness (Shields, Gardner, Bredemeir, & Bostro, 1997). In general, leaders have been found to be most effective when they are able to provide social support and positive feedback (Chelladurai & Saleh, 2007); an absence of such leadership behaviours has been shown to have negative consequences, as highlighted by this group of athletes. For example, when negative body language was displayed, particularly by the leader, the players became disconnected from one another and ceased communicating, which ultimately affected team performance:

I think we all need to re-group if ever we separate....When we're together, we're happier even if we're losing and it makes it easier to come back. Whereas if we're not talking or communicating, we might as well just shake. I get really mad on the ice [too], and it's so hard to re-group....But it seems like being a team is more important....it seems like things are showing that when we get down, we don't win games. So it would be better if we could try to fix that. (Athlete 3)

The coach responded by reminding the athletes that by playing more as a team and displaying positive leadership behaviors, their goals and desired outcomes would be more likely to align:

You talk about the importance of winning and it being so important, and I just find it curious that you know there are a whole bunch of different things that can help you win ... communication and team dynamics are so important, so why wouldn't we all want to find ways of communicating effectively with each other if it's going to help us win?

Athlete 4 remarked that in their sport, every single player played a role in each shot and as such, blame could rarely be placed on one individual. There was consensus that each player should be accountable and accept the role that they played in missed shots. Also, in doing so, they would likely feel more 'together' even when things were not going well. Athlete 4's statement marked the initiative that she was taking in order to become a more positive leader. That being said, she still demonstrated difficulty self-regulating and being an effective leader when situations became challenging. As found by Wolfe (2006), leaders must cope with various obstacles (e.g., sub-optimal individual and team performance, inter-team relationship issues, life stress, etc.) which inevitably make it more difficult to self-regulate unless effective regulatory skills and processes are in place.

As the team was making efforts to communicate more effectively with one another, they found it difficult to determine exactly what they should say to each other in the face of obstacles, as each individual had different expectations: "It's just hard because everyone is so different; our personalities...[and] the way we react and expect others to react is all different" (Athlete 4). Consistent with Beauchamp and colleagues' (2005) findings, the athletes needed to better understand their own personalities and their preferences for communication, as well as the preferences of those around them. In doing so, they could reflect on the implications that their thoughts, emotions, and behaviours could potentially have on team functioning. Thus, the consultant reminded the athletes that by discussing their differences, they could become more united in that they would be more aware of how they each needed to feel, think, and behave in order to perform at their best, and help each other achieve this. As such, it was likely that they would have to respond to each person differently according to the situation. This recommendation stemmed from Zimmerman's (2000) finding that one's ability to self-regulate is

influenced by the presence of others and that self-regulating individuals are able to adapt to varying conditions. For example, since Athlete 2 was sensitive to negative body language, the team agreed that in the event she would make a mistake, it would be important for them to remain supportive and neutral so that she could refocus and get back to feeling the way she wanted. However, the athletes were realistic and acknowledged that in times of stress, communicating empathetically would not be easy. As such, they would benefit from learning more about each other's communication skills and style and identify possible barriers to communication to further enhance team functioning (Beauchamp et al.).

Aside from being more accountable and respecting each other's differences, another strategy identified to enhance communication on the ice was regular scrumming (i.e., the team regroups on the side after an end to discuss) as it would encourage them to stay connected and work as a team. By the end of the session, the athletes seemed pleased with the outcome – they had laid their issues on the table and developed solutions in order to minimize the likelihood of 'separating' and not communicating in the face of future obstacles. As the coach put it:

The reality is that we are who we are. And so in order for us to get along well, we need to find ways of saying the right things and doing the right things that allow people to play feeling good. So I think that's a goal for all of us.... So I have to find the right way to talk to you, to help you, while you collectively need to continually try to find the right way to help each other be great out there!

In this meeting, the team took steps towards developing an awareness of certain discrepancies (Carver & Scheier, 1981) including how they were feeling in relation to how they wanted to feel to remain cohesive and achieve excellence on the ice. They continued to discuss

more specific strategies to help each other achieve their preferred individual and collective feel more often and control it in the face of obstacles (Vohs & Baumeister, 2004).

Intervention Session 4 – We’re Confident for Provincials

During an intervention session prior to the Junior Provincial Championships, the coach addressed the progress the team had made thus far:

I’m really pleased with where [we’re] at. I think that if we do a comparison of last year to this year, we’re a more confident team...We have a great game plan that is being executed really well, and last year we were still figuring it out. So that’s a real step in the right direction....I [also] think that we’re in a really good space team dynamics wise....I see those as real positives, and I just sense a real determination to really do well.

The athletes agreed, stating that they felt more calm and confident, and they were working hard to communicate effectively with one another. They also acknowledged that lately, when they encountered obstacles, “instead of all going different ways we’re all grouping together” (Athlete 3), which had been an important strategy discussed in an earlier session. This was an indication that team cohesion (Carron et al., 2005) and self-regulation (Zimmerman, 2000; Vohs & Baumeister, 2004) was increasing.

The previous year, the team struggled at Provincials. Thus, the consultant felt that it was important to anticipate and prepare to overcome obstacles they could encounter, such as fatigue, injuries, mistakes, and excessive socializing. Athlete 1 did not believe she would be distracted, yet the other athletes were concerned about her being a “social butterfly.” In order to limit unnecessary distractions, the team developed a collective pre-game routine, which they committed to follow. Many studies have shown the importance of pre-game routines to increase

the ability to focus and refocus in competitive situations (Durand-Bush & Salmela, 2002; Greenleaf et al., 2001; Orlick & Partington, 1988).

The coach also acknowledged that because they were the favoured team to win Provincials, this had the potential to put additional pressure on them. The players unanimously agreed that they should not self-impose more pressure because this could lead them to play sub-optimally. Research has shown that when athletes experience increased pressure to win, whether self-imposed or imposed by others, they frequently suffer from performance detriments (Baumeister, 1984; Weinberg & Gould, 2003). The curlers found that when this occurred, their interpersonal relationships were also negatively impacted thus they suggested that when mistakes would be made at Provincials, it would be important to acknowledge the role they each played in the process through verbal or non-verbal behaviour, in order to minimize frustration.

However, since frustration would inevitably occur at some point during the tournament, the team discussed strategies to regroup and reconnect with their desired feel of “togetherness.” To effectively respond to obstacles, the coach suggested that they scrum consistently to communicate and ensure they are on the same page. Athlete 1, in particular, committed to initiating communication as she was generally the most “easy going” on the ice. Athlete 3 noted that one strategy she used to help her feel optimally and reset after setbacks was to focus on her teammates: “I just try to make everyone else happy so that it will rub off on me....I try to make other people feel that way so that I feel that way [too].” Other strategies shared by the athletes included breathing techniques, humour, as well as “letting go of mistakes” using mental or physical triggers. The consultant also reminded them to pay attention to how they felt physically to be aware of any muscle tension in their body so they could relax and execute the necessary skills.

As in Callary and Durand-Bush's (2008) study, the team felt that they would not always be able to foresee potentially negative situations or events thus the consultant and researcher played a key role in helping the athletes and coach prepare for the competition by identifying obstacles or distractions and developing a plan to respond to them. By devising a sound competition plan, it was believed that the athletes would be able to better respond to unforeseen circumstances (Greenleaf et al., 2001), and refocus in the moment (Orlick & Partington, 1998).

In the end, the team felt that keeping things in perspective would have an important impact on their performance. As they mentioned previously, they often felt more pressure when competing at Junior events. Thus, it was vital for them to approach Provincials like any other tournament:

We do our best and whatever happens, happens. If it doesn't work out, it doesn't work out. It's how it's going to go; It's just another bonspiel. You can't be like 'Oh my God, Provincials!' That's how everybody looks at it every year, and it's stressful. We just have to play our best. (Athlete 4)

The athletes believed they would be the best team there and they simply needed to remain calm and confident, and "get the job done." As the literature shows that confidence is one of the key characteristics differentiating successful and less successful athletes (Durand-Bush, Salmela, & Green-Demers, 2001; Mahoney, Gabriel, & Perkins, 1987), attempts would be made to help the team feel confident throughout the tournament.

Following the group intervention session, the coach and consultant reflected on each player going into this tournament. The coach was really pleased with the efforts that the team had made to communicate and stay together. He noted the skip's evolving leadership behaviors:

[Athlete 4] has really been making efforts to come back to the team quicker and to not have a big lip when she misses and stay real quiet. I like that... One day she said 'Okay guys, help me if you see that I'm [in trouble].' It's not her way to admit to that kind of stuff, [but] I think it's important to our success for her to have those thoughts. The fact that she's headed in the right direction in terms of trying to re-connect is really positive.

The coach also mentioned that he had talked to the lead, who had agreed to go to the skip when she was angry or frustrated, as her efforts seemed to be well received. Because the lead was consistently laid back and positive, she seemed to compliment the skip in stressful situations. However, the coach also acknowledged that because of the lead's social nature, focus could be a problem at Provincials. As such, it was believed that one-on-one conversations with her throughout the tournament might help keep her on task.

With regards to Athlete 2, the coach felt that efforts might be needed to keep her confidence high throughout the tournament. He noted that she was a perfectionist who focused on her errors even when she was playing well. Athlete 3, on the other hand, would have to be able to focus on herself as she "sometimes has more difficulty accepting responsibility for mistakes; it's the ice, or her knee is sore, or the rock picked." As this was an issue that affected not only Athlete 3 but the team as a whole, the coach decided it would be worthwhile for each player to reflect on what they did well during each game, as well as what they could improve, and share that with each other after games. By doing so, the players would be forced to recognize their strengths but also realize that none of them were perfect. This would foster the team's collective awareness and as Dunn and Holt (2004) found, this type of exercise could contribute to increased understanding of the self and others, as well as group cohesion. Furthermore, in accordance with Eys and colleagues (2006), the coach believed that if the athletes could better

understand and accept their role and performances on the team, they would experience less anxiety, more satisfaction, and a higher level of cohesion.

Provincials – Staying in Control Under Pressure

Both the consultant and the researcher were present at Provincials. It was noted that despite numerous discussions regarding how to effectively communicate with one another, at the onset of the tournament, the athletes appeared to be struggling with on-ice communication. From the coach and consultant's perspective, it appeared as though they were often playing as individuals. As the team had previously indicated that they wanted to feel "together" and "supported," this was addressed immediately and steps were taken to promote positive verbal and non-verbal communication by tracking it during games and providing the athletes with feedback. As a result, the team felt responsible for doing their part to keep the team united and on-ice communication increased (Eys et al., 2006). However, when more shots were missed and the team struggled during subsequent games, the players had difficulty self-regulating and staying together. This was likely compounded by the skip's behaviour that suggested to her teammates that she was "pissed off" with them or herself. The coach alluded to this as "fair weather communication" as it appeared that she would revert inside herself whenever games became difficult. Following a challenging game, the coach shared: "You need to think of yourself as a thick skinned rhinoceros. To become champions, you need to develop a thicker skin and not let mistakes affect you." Despite the fact that the team was undefeated going into the quarter finals, the coach presented each player with a small "rhino" figurine to motivate the girls to toughen up and remain united in the upcoming challenging games. Consistent with the literature, this citation from the coach highlights the importance of being mentally tough, one of the key factors believed to influence elite performance (Gould et al., 2002). Coaches and sport

psychology consultants play a crucial role in helping athletes develop this mental skill directly through mentoring and teaching, as well as indirectly through nurturing, motivating, supporting, and modelling (Gould et al.). Both direct and indirect methods were used by the coach and consultant.

The semi-final game was very tight, which tested the team's ability to effectively work through obstacles. Following the game, Athlete 4 shared that although she was extremely frustrated during the game, the team still worked as a unit and maintained communication. They were showing signs that they really understood the importance of this and could better regulate themselves. The skip said; "As long as we're communicating and we feel together and supported, we're good". The team proved to themselves that even when their performance was sub-optimal, by being "thick skinned" and talking when something negative occurred, they could still win the game. The athletes' experiences are consistent with Williams and Widmeyer's (1991) findings that communication and member motivation are important moderators of the cohesion-performance relationship; engaging in effective communication and working towards group goals leads to improved performance by reducing group coordination and motivation losses.

As anticipated, there was pressure on the team as they prepared for the final game due to the fact that they wanted to "win badly," they were the favourite team to win, and they had consistently lost in the final game in previous years. Each athlete was dealing with this pressure differently - Athlete 1 calmly stated "I'm not nervous. I haven't been for the other games either" whereas Athlete 2 felt anxious because it was "all or nothing" for her; it was her last chance to go to Junior Nationals. Athlete 3 felt sick and was unable to eat, yet she felt that if they could "just stay together no matter what," they would be fine. Athlete 4 stated that she just wanted to win.

The hour prior to the final game, the team played a game called “Catch-Phrase” to keep the atmosphere light– the game got the team laughing and communicating, and focused their thoughts on something other than the upcoming game. This strategy seemed to cause a shift in their perspective as afterwards, Athlete 2 stated that she was feeling confident and Athlete 4 remarked that she was “feeling good” and was “going to have fun.” As the game started, the coach felt that the team was in a “really good place.” The skip was calling a very strategic game and the athletes were playing with a great deal of skill and consistency. Communication also appeared to be at a maximum as the athletes were discussing shot calls together and sharing the responsibility for the outcome of the game. The plan that they had prepared to regulate themselves was being extremely well executed and in the end, they won the game. The athletes and coach were inevitably thrilled, and family and friends who supported them throughout their career were extremely pleased and proud. The players and coach grinned from ear-to-ear, hugged their supporters, and some of them cried because they were so happy to have finally achieved their goal – they would be representing their province at Nationals.

Intervention Session 5 – Preparing for Nationals

Following Provincials, the team debriefed the tournament in order to determine what went well and what needed to be improved for Nationals. The majority of the discussion was focused on the final game, as it exemplified how the team wanted to feel and perform.

When asked what contributed to their desired team feel, the athletes stated that despite feeling nervous prior to the game, they felt calm, confident, and relaxed during the game. The team attributed their optimal feel to their unique pre-game preparation; playing Catch-Phrase generated laughter and team unity, and allowed the athletes to take their mind off the upcoming game. Communication during the final game also appeared to be at an optimal level. For

example, the skip was communicating and giving her teammates choices regarding their upcoming shots. The players felt that this not only reflected the confidence she had in her teammates, but also led them to feel more confident, comfortable and relaxed; “[It gives me] more confidence because you’re like, ‘Okay well, I’m choosing this [shot] and I know that I can throw’” (Athlete 2). Thus, it appeared as though remaining united, having fun, and communicating with one another under pressure contributed to their optimal performance and win during this final game. Athlete 3 commented:

When I think back to last year, I think of a dark curling club and darkness....I feel like it was a rainstorm last year when we had the final, and this year was a sunny day. That’s how the day felt. I don’t know I just felt completely different when I think back to it.

Clearly, the athletes were making great improvements towards self-regulating to experience their desired feel and achieve optimal performance.

Despite their impressive results, the team reported that they still encountered obstacles throughout the tournament, which have been shown in previous resonance studies to be an inevitable part of the process (Arcand et al., 2007; Burke & Durand-Bush, 2009; Callary & Durand-Bush, 2008; Doell et al., 2006; Lussier-Ley & Durand-Bush, 2009; Simon & Durand-Bush, 2009). For example, communication was not always optimal between the third and skip in certain situations. As this was something that threatened team chemistry and performance, the coach brought up the issue during the session and asked how these two individuals might work best together at Nationals. The skip shared that it frustrated her when the third insisted on certain shots because she felt that she was not always in the best strategic position to make these calls and it also caused her to doubt herself. The coach reminded the team:

To make the right decision is one thing, but to say it right to get there is just as important.

If you said it the right way, and you said it in a way that everyone is feeling good, then you're going to be in the right frame of mind to focus on making the shot.

Athlete 3 was unaware that some of her actions led the skip to feel frustrated. By discussing the issue and increasing awareness, it was anticipated that it would be resolved for Nationals.

The latter part of the discussion focused on other preparations for Nationals. The athletes did not know what to expect because they had never been there. It was clear that their goal was to win, and in order to do so they wanted to continue to feel relaxed, confident, and supported.

When asked to anticipate potential obstacles, an important one seemed to be game scores.

Athlete 4 shared how tight games might affect her: "I get more nervous when the score is closer; I get stressed out. It takes a toll on my system....I'm just on edge. I'm more likely to get angry or not talk." She also recognized that her ability to communicate effectively with her teammates and make quality shots may be affected as well. The coach reminded the players that it was important to recognize that each game was going to be tough. Athlete 4 replied:

That's what stresses me out. I felt really good in the final [at Provincials] because I was consciously trying not to be stressed and just trying to stay calm and together. [However], I felt like I had to work really hard at it....It's easier [when] it's your last game - as long as you play well and you're calm in your last game, you'll be okay. Whereas if you're only a couple of games in, you're like 'Oh God, I still have 10 more games of this.' It's just a lot to think about.

This statement highlights how effortful self-regulation can be. The ability to recognize and manage one's behaviours, thoughts, and emotions requires attentiveness, willpower, and self-control (Vohs & Baumeister, 2004). Individuals must be aware of discrepancies between

their present and desired selves and consciously take steps to reduce them (Carver & Scheier, 1981). As Athlete 4 reported, it took conscious effort and energy for her to remain calm and connected with teammates and execute her shots during high-pressure situations. It is arguably even more challenging to do this over a long period of time, such as an eight day competition. As Durand-Bush and colleagues found, self-regulation skills must be practiced and highly refined if individuals want to be able to consistently and effectively use them in the face of challenging situations and obstacles (Burke & Durand-Bush, 2009; Callary & Durand-Bush, 2008; Simon & Durand-Bush, 2009).

Another preparation strategy put forth by the team for Nationals was to address negative issues as they arose. As the coach relayed it, “the team often goes into ‘funks’ when things are going poorly, but they always seem to pull themselves out of it sooner or later.” As such, he proposed that a goal for Nationals could be to shorten or avoid the “funks” that could potentially occur when negative experiences or performances arise. In response to the skip’s concern with her potential frustration, the coach suggested that she keep communicating:

[If] you came down in the scrum and said something like ‘Sorry guys,’ then [your teammates] would feel better because (a) you acknowledge it, and (b) they’re [not left] wondering whether you’re mad at them or not. If you don’t say anything when there’s a miss, then they’re wondering if you’re mad at them.

Athlete 4 committed to letting go of mistakes, “I need to work on getting over it faster....I think that would really help us at Nationals.” Overall, this session highlighted the importance of pre-competition planning and the coach’s presence and role in creating awareness and discussing collective strategies to execute the game plan and respond to potential setbacks. As suggested in the literature, an important factor associated with elite performance is sound competition

planning and mental preparation (Durand-Bush & Salmela, 2002; Greenleaf et al., 2001; Orlick & Partington, 1988), which can be effectively nurtured not only by sport psychology consultants but also through coach involvement (Gould et al., 2002). In the end, the team asked that the consultant monitor their verbal and non-verbal communication as it would remind them to stay positive and together as a team.

Nationals – What an Emotional Ride!

At the onset of the championship, the team “felt good” and from the coach and consultant’s perspective, they athletes appeared to be calm and confident. While results suggest that they were highly successful during the eight-day competition, they also encountered obstacles that interfered with their desired feel, as well as their performance and team cohesion.

During the second game, the team encountered their first challenge. After the skip missed a few shots, there was a clear shift in how she felt and subsequently behaved. The climate on the ice became negative and the players were getting frustrated with the skip’s silence and her negative body language. While they kept executing their shots, the skip “got into a funk” that was debilitating to her performance; she made difficult shot calls that were not well executed. She became extremely frustrated and withdrawn. Following the loss of the game, the other athletes were noticeably concerned and irritated by the skip’s attitude and lack of positive leadership.

Following the game, the coach reminded the players that as previously discussed, they each play a role in each shot and they should accept and acknowledge when they are not executing well instead of looking to blame others for this. The players were quiet but aside from the skip, they agreed that they should work on this and play more as a team. The skip’s body language during the meeting indicated that she was not feeling optimally; she appeared to be

having difficulty self-regulating to get back to her desired feel. The coach was frustrated by this and said to the consultant and researcher after the meeting: “From a coach’s perspective, I’m upset that she cannot be a more positive leader and turn herself around more quickly.” Prior to going to bed that night, the consultant sent the skip a text message saying, “You’re a great leader, I know you will shine tomorrow... Sleep well, feel better.” It is possible that such a message reminded the skip of her responsibilities to the team, both as a player and a leader, and the importance of regulating her thoughts, feelings, and actions. Fortunately, the skip was able to reconnect with the team the next day and there was a dramatic increase in communication and the team fought together to win their subsequent games.

Lack of accountability and effective communication became a much larger issue later in the week when the third was observed crying on the ice, and a parent informed the coach and consultant that harsh words had been exchanged between a player and herself. The skip also appeared to be upset with the front end’s performance, as evidenced by her body language and facial expressions. The team won the game due to a large lead at the time of the incident, however, a meeting was held immediately after in order to discuss the issue at play. Conflict arose when perceptions of the incident differed between the third and second. Athlete 2 expressed her hurt and frustration:

Do you think that after being yelled at I’m going to be like ‘Oh sorry?’ I’m [really] mad!
I realize that I [messed] up, and I’m sorry about that. But I don’t need to hear it! I don’t need to have the constant blame! Do you know how annoying that is?

The coach shared his own frustration over the team’s lack of accountability for missed shots:

Do you think it’s easy for me to watch you guys cry and be upset because you’re not getting along?...I spend as much time on this as you do! I’m frustrated to see you

fighting; I'm frustrated when you won't share responsibility for stuff! This team likes to point fingers! I don't see a whole lot of people saying 'Sorry I could have thrown that better, I could have swept that better, I could have called that better.'

Clearly, the lack of accountability and proper on-ice communication was affecting how both the athletes and coach were feeling and the level of team cohesion. Matheson, Mathes, and Murray (1997) found that cohesive teams are better able to cope with setbacks, such as sub-optimal performance, and share responsibility for errors. However, this team was struggling to do so and often made self-protective attributions for errors (Carron et al., 2002), that is, they blamed others in order to minimize their own role in mistakes or failures. It was hoped that this discussion would help the team develop a collective awareness and force each individual to accept and recognize how their lack of self-regulation was affecting their performance (Zimmerman, 2000).

The consultant reminded the team of their previously discussed plan for Nationals to address issues as they arose and to refocus quickly after setbacks because of the potential effect this could have on their performance and overall experience. She shared that they appeared to be "a volatile team about to explode at any moment." She pointed out their inconsistent behaviour and ineffective responses to obstacles and prompted the team to start discussing solutions to resolve the situation. After this emotion-filled meeting, the consultant shared with the coach that she did not enjoy confronting the team the way she did, however in this particular situation, it was deemed necessary by the coach and the consultant as the athletes failed to see the impact that their thoughts, feelings, and behaviors had on their team dynamics and performance. She hoped that it would lead to positive changes (Corey, 2009; Martin, 2000) and asked the athletes to reflect on how privileged they were to be competing at Nationals. Thus, the aim was not to

target the team's weaknesses, but rather to help them recognize that they were suppressing their own capabilities (Corey). This strategy appeared to be effective as the athletes reconnected quite successfully after this meeting as their communication not only increased but was also more positive in subsequent games. The athletes kept their distance from the coach and the consultant during the day and the latter gave them space to digest and reflect on what had just occurred.

Maintaining an appropriate focus throughout the eight-day tournament was another challenge the team faced. The coach observed the lead's struggles: "She is missing some shots that should be easy to make." The consultant noted that she maintained a broad focus and paid attention to irrelevant cues around her, which could partly explain her decreased performance (Boutcher, 2002). In order to provide her and the team with more tangible feedback regarding their focus, the researcher recorded the number of times the players focused away from their game. With this information, the coach established a goal with the lead to help her stay focused during games. Over the course of the tournament, the data collected suggested that she improved her focus, which appeared to not only enhance her performance, but also allow her to be more involved in the decision-making process on the ice.

Throughout the week, each player responded to pressure differently – two of the players generally felt nervous throughout the tournament while the other two only felt "nerves" when the pressure or uncertainty of events increased. Athlete 2 in particular referenced being nervous before games, particularly as they got closer to the final. However, she appeared to be effectively self-regulating as she was performing consistently well in each game. For the most part, the athletes managed their anxiety by using previously discussed regulatory strategies, including putting games into perspective and staying positive, acknowledging the control they had over the way they felt and performed, executing their pre-game routine, and doing breathing exercises.

The use of such strategies has been reported by other elite athletes, including Olympic and World champions (Durand-Bush & Salmela, 2002).

During the final game, it appeared as though none of the athletes were feeling optimally; each player was under-performing even though they had prepared well for this important and exciting game. Following a devastating close loss, Athlete 4 shared with the coach and consultant that she felt the team was too nervous during the game, which in part contributed to unusual errors and their inability to adjust to the ice. Although the team anticipated potential obstacles such as television cameras, noisy fans, and longer breaks between ends, she noted that the team could have better prepared to deal with them. Nonetheless, the team was overall pleased and proud of the outcome of the championship despite losing a heart-wrenching final game, as they had achieved a great accomplishment in winning the silver medal; this was obvious in their positive demeanour and exchanges during the final banquet.

The tournament highlighted the strides the athletes and coach made throughout the year to learn to regulate themselves, particularly how they individually and collectively felt and behaved in each other's presence. Nevertheless, areas needing improvement also emerged. The coach and consultant discussed that further enhancing self-regulation skills would be important for the players in order for them to improve their consistency to focus and perform under extreme pressure situations. Team cohesion and communication significantly improved throughout the season, nonetheless, it was felt that more work could be done to enhance these crucial team processes (Eys et al., 2006) so that the players could consistently bring themselves to each game and remain united.

Intervention Session 6 – Let's Draw the Lessons

The session following Nationals was led by the coach who started by expressing his pride in the team's accomplishments:

It's really difficult to go to Nationals the first time and win it. And to get as close as you did is really special. If I recall, we talked about goals going into Nationals and I remember sitting around at the [curling club] and you guys saying you'd be happy if you made playoffs. And you know, you could have won it, you were that close. I think if you look back at the records, seldom do teams win the first time but when they went back the next time or the time after, they were able to do better and win it. So I think it puts you in a good position for the year coming up.

The players were asked to reflect on what they thought they did well as a team, and Athlete 1 stated without hesitation, "The blow-up [session after the incident during a game] was helpful as it forced us to deal with issues that were being swept under the rug." However, not everyone agreed with the way in which the group meeting was conducted. Athlete 4 stated: "It made me feel pissed off right before and during the next game." Both Athletes 2 and 3 felt that some form of intervention was necessary as they were both upset and not speaking to one another, but conferred that it could have been addressed without the whole team being present. The coach, consultant, and researcher noted that a team meeting was necessary since Athlete 4, who had the most difficulty accepting her role in the 'blow up,' had actually contributed to it by displaying poor leadership and a lack of sportsmanship with her teammates on the ice during the game. As such, they felt that they would again use confrontation with the entire team in a similar situation in order for all of the athletes to accept responsibility and understand the impact they had on one another and the overall team feel.

Aside from this, the team felt that their ability to communicate greatly improved throughout the season and peaked at Nationals. However, each player felt that communication regarding shot-making could still be increased. The team talked about a specific example from the final game, when a guard was thrown by the skip. The coach was very pleased that the players brought this up and demonstrated his support. According to Jowett and Cockerill (2003), this fosters complementarity and enhances coach-athlete relationships. The coach shared:

That's a dynamite example. That's the one that comes to mind for me where if we had only communicated more effectively, we could have ended up with a different result. And that could have been the turning point in the game; that could have won us the game. I'm really glad to hear you guys say that because I think that's important. I don't think it's hard to learn, but I think it's the case of making sure that we do that initial talking [and if we can improve communication between the front and back end, then there's a]...better chance...that we can get plan B.

Similar to elite athletes who engage in ongoing deliberate practice to relentlessly improve performance (Durand-Bush & Salmela, 2002), the curlers committed to practicing their communication in upcoming training sessions as they felt it would optimize their productivity and help them work more effectively as a team.

Another area the team felt could be improved based on their experience at Nationals was their ability to manage stress and anxiety. How they felt before the final game at Nationals was dramatically different than the way they felt prior to their final game at Provincials. According to them, this could explain differences in the way they performed collectively and individually during these two final games. Greenleaf and colleagues (2001) found that it is common for athletes to achieve sub-optimal performance when they are forced to stray from their normal

routine, for example, because of time delays before games, unexpected nerves, and television crews. If athletes are better able to deal with their anxiety, they may experience less performance decrements in high-pressure situations (Gould et al., 2002). The consultant assured the players that they could work individually during the off-season to better prepare themselves to deal with stressful situations and regulate their anxiety.

The athletes reflected on the role the consultant played at Nationals. The team clearly valued her contribution: “Even if we’re not talking about stuff, even the fact that you’re there as a support, I find helpful....You’re relaxed and it rubs off on everyone else. At least it rubs off onto me, I find” (Athlete 3). Athlete 4 agreed, stating that because they [the players and the coach] were so “high-strung,” it helped to have a different perspective from the consultant. In line with the findings of previous studies in which self-regulation interventions were facilitated by a consultant (Callary & Durand-Bush, 2008; Lussier-Ley & Durand-Bush, 2009; Simon & Durand-Bush, 2009), the athletes felt that they benefited from the presence of a neutral person who promoted and developed positive communication, relationships, and support.

Following the team debrief, the consultant and the coach individually met with each athlete to further discuss their performance at Nationals and what they wanted to improve the following season. Fuhriman and Burlingame (1990), and McRoberts, Burlingame, and Hoag (1998) demonstrated that both group and individual counseling sessions are effective in increasing awareness. The individual sessions were deemed important to give the athletes the opportunity to express ideas and concerns they may not have felt comfortable enough to share in a team setting (Callary & Durand-Bush, 2008; Martin, 2000).

Athlete 1 felt that her main strength was her positive contribution to team dynamics. Throughout the season, she was positive, energetic, and played a large role in solving conflicts as

she often stayed neutral. She also had the ability to help her teammates bounce back, particularly the skip, as she frequently looked to her to “brighten her spirits.” As the coach put it, “It is a serious team, and we can get off the rails,” however, Athlete 1 was someone who was able to keep them on an “even keel.” One area she felt needed improvement was her throwing consistency. From the coach and consultant’s perspective, her inconsistency could be explained by her lack of focus, which was apparent at Nationals. The coach reminded her:

It’s hard to try and process all of the stuff that goes on in a competitive game if you’ve got these other things going on. Sometimes it’s good to check out from a relaxation point of view and refocus, but if it’s constantly going on, then it [can’t be good].

Athlete 2 made reference to feeling nervous during the final game: “Nerves were a big factor. We would never make any of those mistakes throughout the year...like throw things through the house. That’s not us!” She felt that this was an area that needed improvement because it led to technical errors and she “lost [her] focus a lot because there were a lot of distractions.” As such, discussion ensued on how they could practice dealing with distractions so as to minimize negative consequences in future situations. The importance of the ability to refocus and remain calm and in control in the face of distractions in elite sport has been consistently reported (Durand-Bush & Salmela, 2002; Greenleaf et al., 2001; Orlick & Partington, 1988). Another area warranting improvement was her brushing, thus the athlete set goals to improve her fitness and committed to engaging in a sufficient amount of deliberate practice (Durand-Bush & Salmela).

Athlete 3 felt that her biggest weakness was mental toughness:

I think that mentally, I need to do some work....I tried not to be nervous [during the final] and I tried to think about other things, ‘it’s just another game’ kind of thing, but [changes

in the competition environment] really threw me off....For the whole team, something was different. The feel wasn't there on the ice, we couldn't get draw weight. It's not like we were throwing badly, just draw weight was all over the place.

She also stated that the team still needed to work on communicating and accepting responsibility for errors, as this was not happening consistently. From her perspective, this contributed to the "blow-up":

[The skip] and I are good with each other... [if we make a mistake] then we'll say it. But we didn't say it to the front end because they never say it to us, and I guess that's how it started accumulating.

As such, frustrations built up throughout the season. Athlete 3 also mentioned that her anger was partly because she did not feel that every team member was committed. She was concerned that they were wasting an amazing opportunity to try and qualify for the Olympics: "We should be practicing like crazy right now, because this is the chance of a lifetime!" Solutions were discussed in order to rectify the situation, such as establishing norms for on and off-ice training, as the presence and acceptance of team norms is associated with enhanced cohesion (Eys et al., 2006).

Athlete 4 shared that her strength was her ability to handle pressure but her leadership, communication, and game strategy warranted improvement. The coach agreed with her:

I agree with your ability to handle pressure; I think you handle it extremely well. I think that you're at your best when it's really important to make big shots, and you've shown that to me as your coach over and over again....I think leadership is really a work in progress, but coming along. I think back to times when, on the ice this year, you said things to the team that maybe in the past you might not have said, like maybe you

apologized. I think that's so important to have the ability to do that once in a while....I think you lead by example by being tough, focused, and dedicated.

With regards to communication, Athlete 4 stated once again, "I don't care if nothing is said" when mistakes are made. The coach responded, "But you're only one person, and what you hear from your teammates is that they don't feel that way; they need to hear it. So it's important to them to know that they're appreciated when they sweep well." The consultant reminded her that effective communication was especially important in critical situations, as things could break down quickly. Athlete 4 agreed that this was something that the team, herself included, should keep refining. Clearly, the athletes still needed to develop an awareness of one another's preferred standards and expectations for communication (Vohs & Baumeister, 2004) and take them into account when interacting with one another, as they have strong implications for team functioning and performance (Beauchamp et al., 2005).

Post-Intervention Session – We Can Better Self-Regulate

Four weeks later, the researcher emailed the team a questionnaire (see Appendix E) to complete to get their final views on the competitive season and the self-regulation intervention in which they participated. The reason for emailing the questionnaire was to accommodate the athletes' and coach's extremely busy schedules, as well as to give them the opportunity to reflect before responding. The researcher calculated mean scores based on the four athletes' and coach's responses, which are presented in Figure 2 to complement the qualitative responses they provided.

Insert Figure 2 here

Individual and Collective Feel. The athletes and coach were asked how the intervention influenced their ability to feel the way they wanted, both individually and collectively. Overall,

mean scores increased from 4.4 to 5.8 from the beginning to the end of the intervention, for both individual and collective feel. Three of the four athletes, as well as the coach, reported that they were able to feel the way they wanted more often as a result of the intervention, while Athlete 2 reported no change due to an increase in stress due to school in the latter part of the season. Athlete 3 noted that the intervention helped her realize that she has control over the way she feels whereas Athlete 1 stated that the discussions helped her feel part of the team. The coach stated that by creating a warm, friendly and trusting atmosphere, the consultant and researcher had increased his ability to regularly feel the way he wanted.

Although mean scores for collective feel improved over the course of the intervention, the teams' qualitative responses varied. Athlete 3 perceived a drastic improvement in the team's ability to achieve a desired feel of "togetherness." She noted that as a team, they rarely felt the way they wanted at the beginning but that was different by the end of the intervention:

I think this was the biggest improvement of all. If we ever got down earlier in the year, the game was pretty much over and everyone would go on attack. Now everyone sticks together as a team and we are able to come back, it's really great the difference of how the team works and is together now.

Athlete 1 and the Coach shared similar perceptions, stating that the intervention helped them to get "on the same page" (Athlete 1). However, Athlete 4 reported no change and felt that the team seldom "grooved together." She expanded by saying that occasionally, when there were problems, the team would "grit their teeth to get through games." Athlete 4 felt that collective feel was not optimized because the season was so busy that there was not enough time to address all of the issues that arose. These results highlight the similarities and differences in the team members' perceptions and experiences. From an applied standpoint, it is not so much the

differences that are important but the communication of these differences so that team members can accept and respect them, and work towards finding solutions to optimize performance and cohesion.

Self-Regulation. With regards to the development of self-regulation skills, which was one of the main goals of the intervention, mean team scores increased from 4.8 to 5.4 as a result of the intervention. That being said, Athlete 2 reported having increased difficulty exerting control over her thoughts, actions, and the way she felt as the end of the season neared:

The season went on for so long... and it really took a toll on my emotions. At nationals when I lashed out, I believe it's just because I was so frustrated with everything [else going on in my life] and it was almost impossible to bring myself back to normal. I began getting frustrated at very little things too; things that normally wouldn't phase me.

Because of other stressors, mainly school demands, Athlete 2 was having difficulty controlling her emotions and reported feeling "burnt out." That being said, although she reported a decrease in her ability to self-regulate as the season progressed and fatigue set in, she stated that had she not participated in the intervention, her level of enjoyment and satisfaction would have been much lower. This athlete's experience highlights the importance of adequately monitoring the emotions, thoughts, and behaviours of elite athletes and their attempts and ability to self-regulate as they often juggle extenuating schedules and demands over extensive periods of time, which increase their susceptibility to burnout (Goodger, Lavalley, Gorely, & Harwood, 2006). Coaches play a crucial role in managing their athletes' experiences and demands but they must also regulate their own (Giges, Petitpas, & Vernacchia, 2004), as research has shown that they are also prone to burnout (Raedeke, Granzyk, & Warren, 2000), especially if they do not possess adequate self-care skills and an ability to balance their coaching and personal life.

Feeling, Thinking, and Behaving the Way You Want. On the other hand, Athletes 1, 3 and 4, as well as the coach, reported that the intervention greatly improved their ability to control and change the way they felt, thought (from 5.2 to 5.6), and behaved (from 4.4 to 5.6) in an attempt to reach optimal performance. For example, the coach shared that he benefited from the intervention because the presence of the consultant and researcher provided him with necessary support and he was able to “bounce thoughts and feelings off of them,” which he felt enhanced his thinking process and minimized feelings of isolation. As such, he was able to respond to obstacles in a more effective manner. Athlete 3 felt that the intervention helped her learn to regulate her emotions rather than let them build up to the point where she would explode. Similarly, Athlete 4 learned that her emotions greatly impacted the team’s collective feel, which helped her realize the importance of managing her behaviours. She expanded by saying that she sometimes “held back [her] emotions” and “learned not to react to anything in a negative way on the ice,” which she believed helped her teammates feel the way they wanted. Of importance to note, however, is the contradiction between the skip’s self-reports, as she indicated that she learned to control her emotions in a way that helped the team achieve desired feel, yet she also reported in response to an earlier question that there was no change to the overall team feel. This discrepancy clearly highlights that the skip was still learning to become more self-aware and self-regulated, and that this process is ongoing.

Identifying Strategies. In terms of application, the athletes and coach reported identifying and using strategies, for example, being more positive, communicating, faking a smile, using humour, and sticking together, that ultimately helped them achieve their desired individual and collective feel, as well as team success: “[The development of regulatory strategies] definitely improved a lot over the year with our team...It’s something we need to keep up because it really

helps our success” (Athlete 3). Overall, the team reported that their ability to develop strategies to self-regulate increased from 4.6 to 5.4 over the course of the intervention.

Overcoming Obstacles. The implementation of such strategies aided the athletes to respond to obstacles, which was evidenced by the teams’ mean scores reflecting the extent to which they were able to anticipate and overcome obstacles at the beginning (mean = 5.0) versus at the end of the intervention (mean = 5.4). However, as expected, none of the athletes nor the coach were able to feel the way they wanted all of the time, which is consistent with past research on resonance (Arcand et al., 2007; Burke & Durand-Bush, 2009; Callary & Durand-Bush, 2008; Doell et al., 2006; Lussier-Ley & Durand-Bush, 2009; Simon & Durand-Bush, 2009). Furthermore, the obstacles were not always sport specific but nevertheless had an impact on the athletes’ performance and interpersonal relationships. Athlete 2 found it particularly difficult to overcome obstacles in her daily life:

[The consultant] definitely did help me get through some obstacles we encountered during the year. My [ability to anticipate and overcome obstacles] decreased not because of a conflict or dynamic issue with the team, I was just growing tired and overwhelmed with all of the time spent in a curling club and at school. Just the aspect of practicing and playing 6 days a week really got to me. I am thrilled with our accomplishments and it's something I really wanted, but I need my life to balance (social, school, curling, and having time to myself)... and I felt like curling dominated all categories.

Interestingly, feeling the way one wants does not always imply feeling positive or happy. As indicated in an individual session with the skip, sometimes it is necessary to feel a certain level of stress and anxiety when performing in highly important competitive situations. This is congruent with the reports of elite mountaineers who seek to feel pain and discomfort when

climbing challenging peaks such as Mount Everest as it is an inevitable part of the process (Burke & Durand-Bush., 2009). Therefore, it appears to be important in self-regulation interventions to help athletes and coaches identify different ways they may want and need to feel depending on the context and situation. Helping them embrace and accept feelings of stress and anxiety and using these to their advantage rather than avoiding or trying to change them may be an alternative strategy that could serve them well in some situations. More research is warranted to examine this.

Playing as a Cohesive Team and Overall Team Cohesion. In terms of team cohesion, although the team's mean scores indicated an improvement over the course of the intervention (from 4.0 to 5.1 from beginning to end), not all team members were in agreement. Athletes 1, 2, and 3 and the coach felt that the intervention dramatically improved team cohesion, while Athlete 4 reported no change because not all issues were addressed throughout the intervention. However, those who noted an improvement reported that the consultant and researcher helped by acting as mediators, which lead to effective conflict resolution:

Having the both of you around to translate the message the teammate is trying to say, or figure out strategies to help reduce the problem, helped us out tremendously. I really don't think that we would be able to do that by ourselves." (Athlete 2)

As a result, the coach found the team to be more united and felt that everyone was getting along much better than they were in the past. Interestingly, although much research has been conducted on cohesion, no empirical studies have examined the role of a consultant in the process of developing and maintaining team cohesion. Results of this study show that the consultant can play a significant role throughout a season in helping athletes and coaches communicate effectively, support each other, resolve conflicts, and complement themselves to

achieve optimal performance. More research should be conducted to shed light on the varying processes and skills involved in the “hands on” development of team cohesion.

Individual and Team Performance. With regards to the extent to which the intervention enhanced individual and team performance, the athletes unanimously indicated that it had a positive influence as they reported a score of 5.6 and 6 out of 7, respectively. It must be noted that team members were not asked to compare their performance at the beginning versus the end of the season, but rather to rate the overall influence of the intervention. Of importance to note, they stated that it was because of the intervention’s positive impact on group processes, particularly communication, that performance was enhanced. The coach reported that the intervention improved his coaching performance because, as a result of his increased ability to self-regulate, he was able to communicate with his players in a way that was much less abrupt and critical than in the past. Much in line with Callary and Durand-Bush’s (2008) findings, the coach was able to draw the connection between the way he was feeling, the way the athletes were feeling, and the way he reacted and responded to them. Two athletes also discussed how, in previous years, team meetings would be poor because words would come out wrong, or issues would be addressed at the wrong time. However, with the help of the consultant and researcher, the athletes and coach learned to address issues in a non-threatening manner, which enhanced their ability to work together.

[Team performance was enhanced by improving] our team dynamics more than anything, and how we treat each other. I’m so grateful for having the sport psychology this year because when things weren’t going well, it wasn’t fun anymore...but now we can still lose and be friends and go out hard in the next game. – Athlete 3

In essence, the team learned that in order to respond to obstacles, they needed to effectively address the way they felt in response to them before coming up with regulatory strategies (Callary & Durand-Bush).

Concluding Remarks

In conclusion, the chronological narrative presented in this article demonstrates the lived experiences of a curling team throughout an entire season and helps us to understand the process in which a consultant and researcher conducted an intervention to help both the athletes and the coach increase their self-regulation to control their thoughts, behaviours and their individual and collective feel, particularly in the face of obstacles. The results show that the intervention positively influenced this team's cohesion and performance. As the coach reported, "The team is getting along much better and playing like a team much more often than in the past." He also saw the intervention as a necessary step toward the achievement of the team's goals: "We needed the intervention because we were not a team that liked to willingly admit to have contributed to poor outcomes on shots. Also, we spent too much time focusing on the negative." However, as stated by Athlete 4, not all issues were resolved throughout the season and areas for improvement were identified. This illustrates that the development of self-regulation skills and cohesion is a longitudinal process with various peaks and valleys. Research demonstrating how team cohesion and performance may be nurtured by coaches and athletes themselves and also mediated by a consultant is scarce. It is recommended that more extensive, in-depth multiple case studies of this type be conducted to fill the present gap in the literature. Ultimately, it is by collecting a substantial amount of data with numerous different teams competing at different levels and in different sports that we will have a thorough understanding of how to help athletes

and coaches navigate the peaks and valleys throughout their competitive season to maintain a high level of cohesion and excellence in their sport and daily life.

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Figure 1

Figure 1. Resonance Performance Model (Callary & Durand-Bush, 2008; adapted from Newburg et al., 2002)

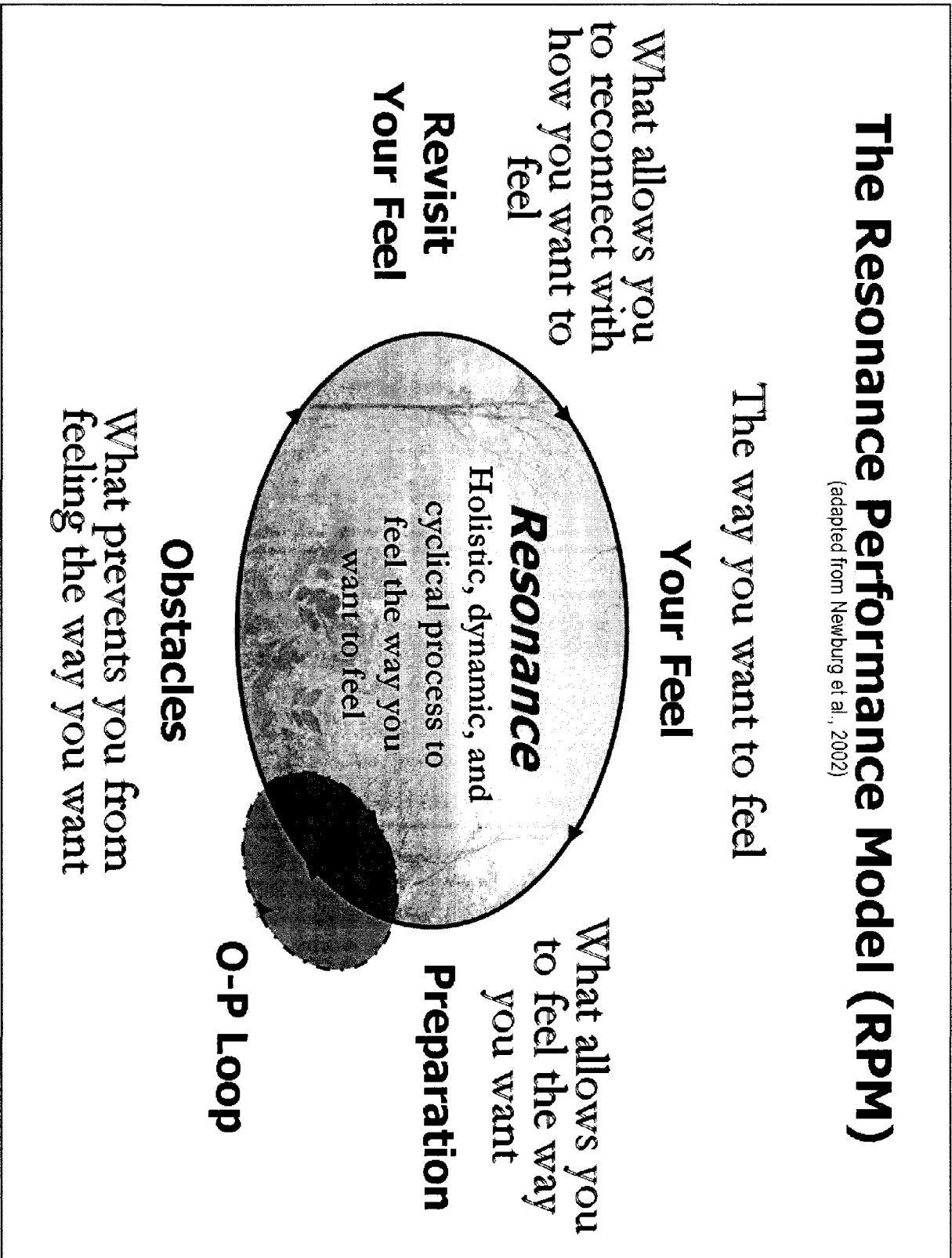


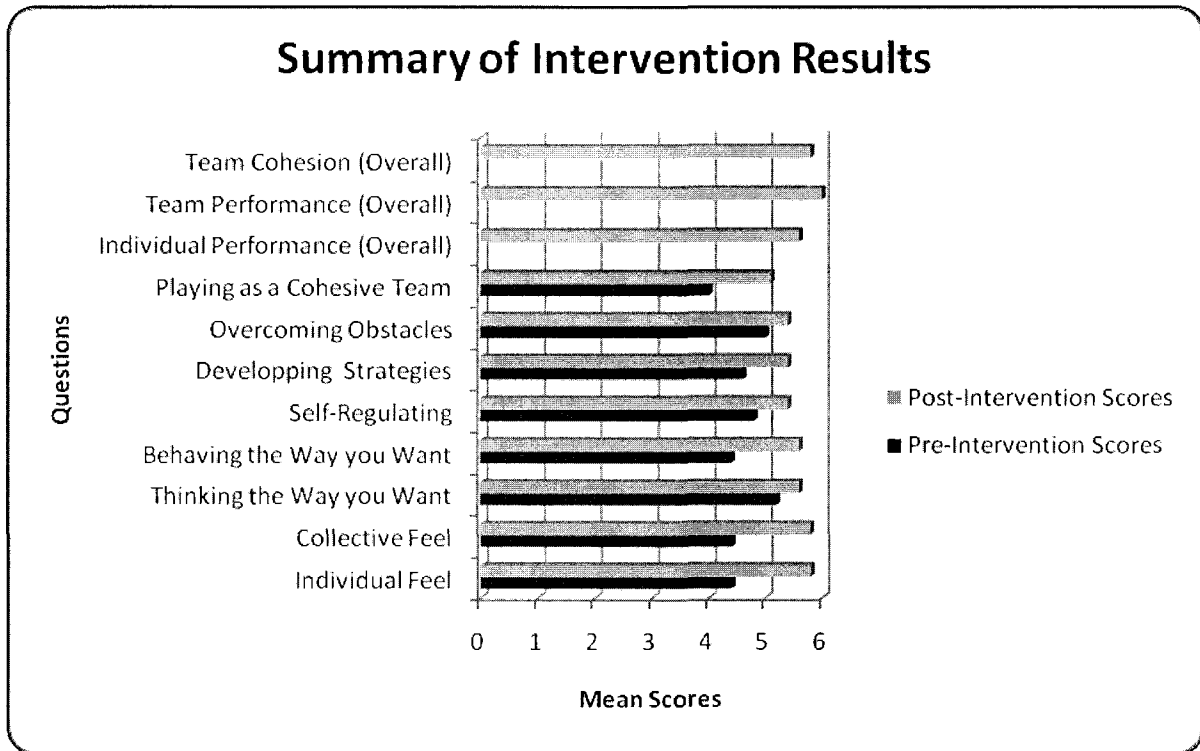
Table 1

Table 1. Overview of the Data Collection Process

PHASE	DURATION	METHODS	OBJECTIVES
Pre-Intervention	4 weeks	<ul style="list-style-type: none"> - Coach interview - Observations 	<ul style="list-style-type: none"> - Does how you feel affect how you perform? - What are overall team dynamics and their impact on performance? <p>Observation of group processes such as interpersonal interaction and communication, displays of feelings or emotions, indications of cohesion, as well as both team and individual performances in practice and competition.</p>
Intervention	16 weeks	<ul style="list-style-type: none"> - Eight group intervention sessions - Individual sessions with the coach - Individual sessions with the athletes - Observations (same as in pre-intervention phase) - Regular debrief sessions between the consultant and researcher 	<p>Guide participants through stages of RPM to facilitate self-regulation.</p> <ul style="list-style-type: none"> - How do you feel being part of this team and sport? - What words describe how you collectively feel during practices and games when you are performing and feeling your best? - What impact do you each have on how the team feels? - What allows you to feel the way you want and why? - What is the most challenging obstacle that you foresee in the upcoming season, and what can you do as a team in order to prepare for it? - In the past, what strategies have been successful or unsuccessful at helping you achieve your desired individual and/or team feel?
Post-Intervention	4 weeks	<ul style="list-style-type: none"> - Questionnaire emailed to coach and athletes at the end of this phase 	<ul style="list-style-type: none"> - To what extent were you able to feel the way you wanted (a) at the beginning of the season, and (b) at the end of the season? - To what extent were you able to develop strategies that helped you regulate your thoughts, actions, and how you felt (a) at the beginning of the season, and (b) at the end of the season? - How did this intervention impact performance and team cohesion?

Figure 2

Figure 2. Summary of Intervention Results.



CHAPTER V

General Conclusion

The aim of the present study was to document how an elite curling team involving four athletes and a coach competing in a high performance context could enhance their cohesion and performance by engaging in a learning process designed to help them self-regulate, particularly, their felt experiences. The combination of multiple-case study (Yin, 2003), narrative (Polkinghorne, 1995; Sparkes, 2002), and participatory (Creswell, 2007; Heron & Reason, 1997) approaches led to thick, in-depth descriptions (Guba & Lincoln, 2005) of the process in which a group feel-driven self-regulation intervention was facilitated by a consultant and researcher using the RPM as a framework (Callary & Durand-Bush, 2008, adapted from Newburg et al., 2002). Results show how an elite coach and his athletes helped each other to feel the way they wanted throughout the season, which can be summarized as “together, supported, positive, calm, and confident.” It was also clearly demonstrated how they identified and attempted to apply self-regulatory strategies to feel the way they wanted more of the time. The main strategy pertained to open, honest, and positive communication amongst team members. Through the intervention, they learned that once they identified their desired feel, they could align their thoughts and actions with this to experience more harmony within themselves and also with their environment. Their reports indicate that at the crux of their preferred standards (Vohs & Baumeister, 2004) was this collective feel of “togetherness” that greatly influenced their ability or inability to think and act in ways that optimized cohesion and performance.

As stipulated in the RPM, the athletes and coach also deliberately and consciously anticipated obstacles that inhibited their desired feel. The narrative approach was key in illustrating the process in which the team identified and effectively or ineffectively addressed

obstacles throughout their competitive season. In line with Carver and Scheier's (1981) findings regarding self-regulation, the team learned to recognize discrepancies between their current and desired internal states. Their most prevailing obstacle throughout the season was their lack of communication and support. The narrative demonstrates the team's challenges and attempts to improve their communication and remain cohesive as a unit. Through the intervention, they observed the importance and outcome of communicating both their positive and negative experiences with their coach and other teammates. According to them, when they communicated well, they reported more social and task cohesion and they performed better. As highlighted by the participants, the intervention helped them to more quickly and effectively respond to obstacles as they arose, particularly during National Championships. The consultant and researcher contributed to this by helping them to acknowledge discrepancies and bringing them back to the core of the process, that is, how they wanted to feel as a team. They provided team members with feedback regarding group processes (e.g., verbal and non-verbal communication, leadership, support, desired collective feel), which ultimately helped them to increase awareness, acceptance, and responsibility. The coach and the athletes learned to revisit their desired feel of togetherness when necessary by applying individual and team strategies, for example, their pre-game routine.

Based on the results of this study, the intervention helped the members of this curling team to enhance their ability to self-regulate as they reported, to different extents, an increased ability to control their thoughts and behaviours, as well as their desired feel, even in the face of obstacles. Evidently though, not all issues were addressed nor resolved over the course of the intervention. As seen throughout the narrative, the athletes and the coach did not feel the way they wanted nor were they able to self-regulate and remain cohesive all of the time. This study

highlights the complex longitudinal nature of self-regulation and team cohesion processes. As reported by Eys and colleagues (2006), group processes are constantly changing and as such, athletes and coaches must constantly adapt and refine their regulatory strategies in response to varying circumstances (Zimmerman, 2000). Each team member noted that the consultant and the researcher were instrumental in the development of self-regulatory skills as they facilitated effective communication, problem-solving, and coping, which lends support to the sport psychology literature highlighting the important role of consultants (Halliwell, Orlick, Ravizza, & Rotella, 1990). The coach and the athletes noted that in this particular team context, they would have had more difficulty achieving their desired collective feel without the support of the neutral consultant and researcher, as interpersonal relationships were often obstacles in the self-regulation process.

Due to the use of a multiple-case study approach, the person-centered nature of the self-regulation intervention and the ensuing unique experiences of this elite team, the results cannot be replicated nor generalized. Nonetheless, this study provides valuable insight into the ways in which a consultant and researcher can nurture the development of self-regulation in order to optimize performance and team cohesion. As this is one of the few studies to explore and thoroughly document evolving self-regulation and team cohesion processes, further research is needed in order to broaden our understanding of the role that self-regulation interventions may play in enhancing the experiences of Canadian athletes through quality coaching (Coaching Association of Canada, 2008) and increase opportunities for them to excel in sport (Sport Canada, 2008).

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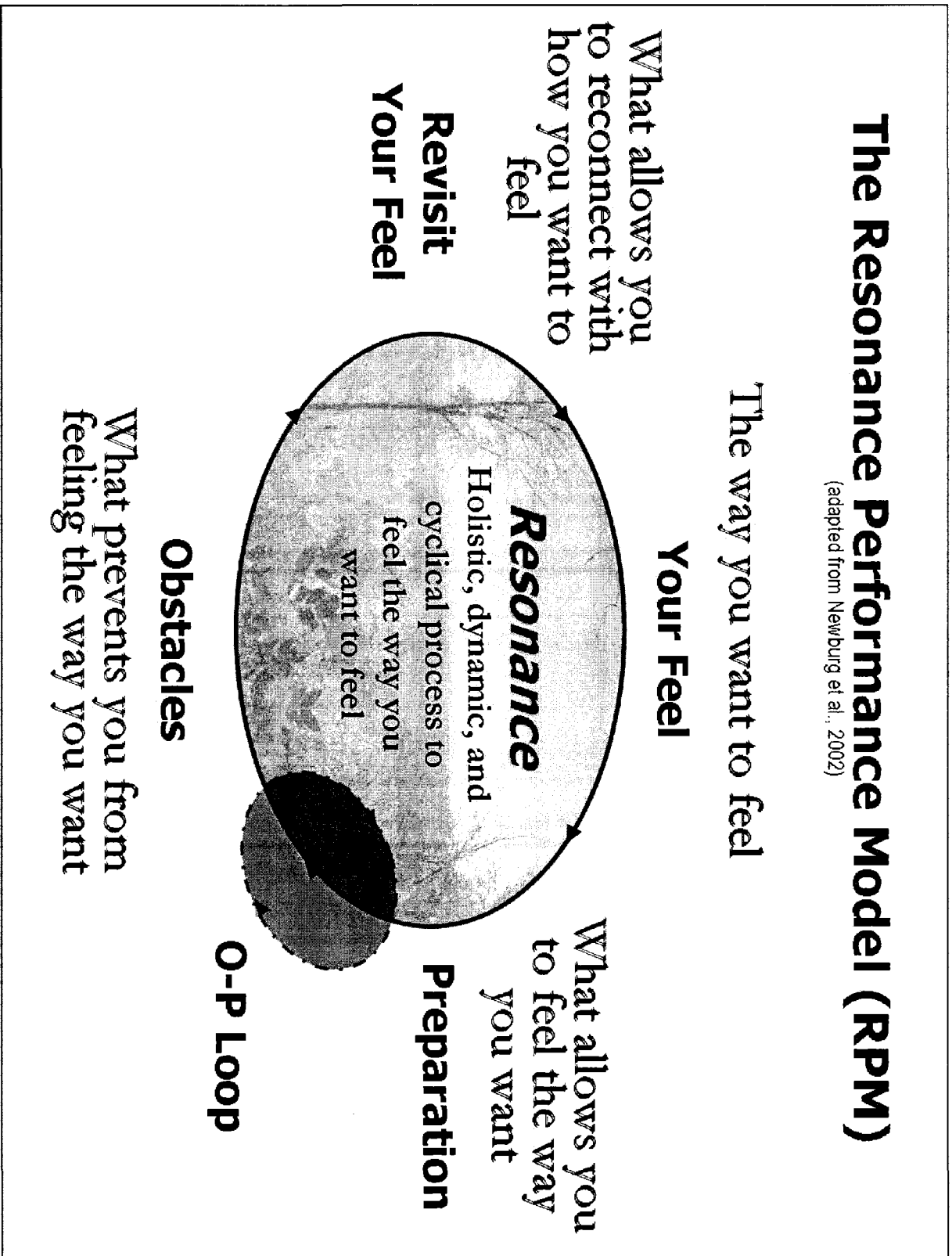
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Appendix A

The Resonance Performance Model

(Callary & Durand-Bush, 2008, adapted from Newburg et al., 2002)





uOttawa

Université d'Ottawa

Faculté des sciences
de la santé

École des sciences de
l'activité physique

University of Ottawa

Faculty of Health
Sciences

School of Human
Kinetics

Appendix B

Letter of Consent for Coaches

Recruitment of an elite coach for a 20-week study to learn and apply
the process of resonance in a team sport context

Dear Coach,

As part of my M.A. thesis, I will be conducting a study under the supervision of Dr. Natalie Durand-Bush, a professor at the University of Ottawa who also works as a sport psychology consultant. The purpose of my study is to determine if and how elite sport team athletes and coaches can learn the process of resonance through a resonance-based intervention, as well as maintain this process over time. In this research, "resonance" is a process or way of life that allows people to feel the way they want to feel as often as possible by taking control of their felt experiences and responding to inevitable obstacles in their daily life.

If you are interested, you, as well as your athletes who are willing to be part of this study, will be asked to participate for a total period of 24 weeks. Your involvement will consist of:

- Attending a total of 15 interviews/sessions throughout the 24-week period:

Phase 1 (Pre-intervention)

One individual interview (approximately 30 minutes)

Phase 2 (Resonance-based intervention)

Eight group consulting sessions (approximately 1-2 hours)

Six individual consulting sessions (approximately 30 minutes)

Phase 3 (Post-intervention)

One questionnaire

- Reading your interview/session narratives in order to verify the information you provided and make any necessary changes.
- Agreeing to be observed during the pre-intervention and intervention phases, both during practices and competitions.

The interviews and intervention sessions will be videotaped, and scheduled at a time and location convenient to you, the athletes when applicable, and myself. The information you will share throughout the study will remain strictly confidential. Videotapes and transcripts of the interviews/intervention sessions will be stored in a locked filing cabinet in the resonance laboratory at the University of Ottawa for a period of five years. Only the research team will have access to the codes and data. While anonymity in the study will be assured by assigning a number to your file so that your name will not appear on or identify any transcript, complete anonymity cannot be guaranteed among the members of your team as you will be engaged in group discussion sessions. If you choose to participate, the information that you share may be used for the purposes of publication in scientific journals. Furthermore, you may be quoted in presentations or publications provided you have given your permission below, however your anonymity is guaranteed. You will receive, by providing a mailing address below, a copy of your interview/intervention session narratives for verification. As a participant, you must be comfortable reading and speaking in English as each interview will be conducted in English only.

Benefits of this study: Many athletes and coaches have reported benefits from participating in previous resonance-based interventions as it has helped them become aware of how they

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feel and want to feel in sport and daily life, and develop strategies in order to improve their performance and well-being. Since the present study involves several intervention sessions, it could be a valuable learning experience for you, and help you become more aware of how both you and your athletes feel and want to feel, in order to perform your best.

Potential risks involved: There is very minimal risk involved in this study. You are asked to participate for a period of 24 weeks, however you are free to withdraw from this study at any point without consequence. A potential risk from this study is that you may experience discomfort when discussing how you feel and want to feel with your team, however, the information that you choose to share is entirely up to you, and no one will encourage you to discuss anything with which you are uncomfortable. Should you feel at any point that additional support would be beneficial or required, an appropriate referral will be made. Please do not hesitate to contact the researcher/consultant throughout the study to address any other concerns.

CONSENT (COACH)

By agreeing to participate in this study, I, _____, understand that my involvement will consist of sharing personal information about my coaching and curling team experiences and that the research will not pose any serious risk. The purpose of this study is not to evaluate my abilities but to gain information on how a team comprised of athletes and coaches can learn and experience resonance. I am also aware that the results of this study, including some direct citations, will be presented at conferences and/or published in professional journals but that my name will not be mentioned at any time.

I understand that I am free to withdraw from the project at any time, including before or during the interviews and intervention sessions. I can also refuse to participate in any aspects of the study, withdraw shared information from the interviews/intervention sessions and journals, and refuse to answer questions without any consequences or prejudice. My signature is given with the understanding that I do not have to give up any rights, that I have been informed of the requirements of the research, and that I agree to take part in this proposed research project.

Please check one of the following options:

- I agree to be quoted but all personally identifying information shall be removed or altered and contents of the quote shall not be revelatory of my identity
- I do not wish to be quoted at all

Any information requests or complaints about the ethical conduct of the project may be addressed to the Protocol Officer for Ethics in Research, Tabaret Hall, 550 Cumberland Street, Room 159, Ottawa, ON, K1N 6N5, tel.: 613-562-5841

There are two copies of the consent form: one for the coach and one for the researcher/consultant.

Researcher/consultant's signature: _____ Date: _____
Participant's signature: _____ Date: _____

Should you have any questions regarding this research project, please contact

Dr. Natalie Durand-Bush at: OR Jamie Collins at:

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University of Ottawa

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Appendix C

Letter of Consent for Athletes

Recruitment of a team of athletes, in conjunction with their coach,
for a 24-week study to learn and apply the process of resonance in a team sport context

Dear Athlete,

As part of my M.A. thesis, I will be conducting a study under the supervision of Dr. Natalie Durand-Bush, a professor at the University of Ottawa who also works as a sport psychology consultant. The purpose of my study is to determine if and how athletes and coaches on an elite athletic team can learn the process of resonance through a resonance-based intervention, as well as maintain this process over time. In this research, "resonance" is a process or way of life that allows people to feel the way they want to feel as often as possible by taking control of your felt experiences and responding to inevitable obstacles in their daily life.

If you are interested, you, as well as your fellow teammates and coach who are willing to participate, will be asked to participate for a total period of 24 weeks. Your involvement will consist of:

- Attending a total of 8 interviews/sessions throughout the 24-week period:

Phase 1 (Pre-intervention)

No interview/session

Phase 2 (Resonance-based intervention)

Eight group consulting sessions (approximately 1-2 hours)

Optional one-on-one sessions

Phase 3 (Post-intervention)

One questionnaire

- Reading your interview narratives from the previous session in order to verify the information you provided and making any necessary changes.
- Agreeing to be observed throughout the 24 weeks of study, both during your practices and competitions.

The interviews and consulting sessions will be videotaped, and scheduled at a time and location convenient to your team and myself. The information you will share throughout the study will remain strictly confidential. Videotapes and transcripts of the interviews and consulting sessions will be stored in a locked filing cabinet in the resonance laboratory at the University of Ottawa for a period of five years. Only the research team will have access to the codes and data. While anonymity in the study will be assured by assigning a number to your file so that your name will not appear on or identify any transcript, complete anonymity cannot be guaranteed among the members of your team as you will be engaged in group discussion sessions. If you choose to participate, the information that you share may be used for the purposes of publication in scientific journals. Furthermore, you may be quoted in presentations or publications provided you have given your permission below, however your anonymity is guaranteed. You will receive, by providing a mailing address below, a copy of your interview narratives for verification. As a participant, you must be comfortable reading and speaking in English as each interview will be conducted in English only.

Benefits of this study: Many athletes and coaches have reported benefits from participating in previous resonance-based interventions as it has helped them become aware of how they

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feel and want to feel in sport and daily life, and develop strategies in order to improve their performance and well-being. Since the present study involves several intervention sessions, it could be a valuable learning experience for you, and help you become more aware of how both you and your teammates feel and want to feel, in order to perform your best.

Potential risks involved: There is very minimal risk involved in this study. You are asked to participate for a period of 24 weeks, however you are free to withdraw from this study at any point without consequence. A potential risk from this study is that you may experience discomfort when discussing how you want to feel with your team, however the information that you choose to share is entirely up to you, and no one will encourage you to discuss anything with which you are uncomfortable. Should you feel at any point that additional support would be beneficial or required, an appropriate referral will be made. Please do not hesitate to contact the researcher/consultant throughout the study to address any other concerns.

CONSENT (ATHLETE)

By agreeing to participate in this study, I, _____, understand that my involvement will consist of sharing personal information about my athletic experience and that the research will not pose any serious risk. The purpose of this study is not to evaluate my abilities but to gain information on how a team comprised of athletes and coaches can learn and experience resonance. I am also aware that the results of this study, including some direct citations, will be presented at conferences and/or published in professional journals but that my name will not be mentioned at any time.

I understand that I am free to withdraw from the project at any time, including before or during the interviews and consulting sessions. I can also refuse to participate in any aspects of the study, withdraw shared information from the interviews/consulting sessions and journals, and refuse to answer questions without any consequences or prejudice. My signature is given with the understanding that I do not have to give up any rights, that I have been informed of the requirements of the research, and that I agree to take part in this proposed research project.

Please check one of the following options:

- I agree to be quoted but all personally identifying information shall be removed or altered and contents of the quote shall not be revelatory of my identity
- I do not wish to be quoted at all

Any information requests or complaints about the ethical conduct of the project may be addressed to the Protocol Officer for Ethics in Research, Tabaret Hall, 550 Cumberland Street, Room 159, Ottawa, ON, K1N 6N5, tel.: 613-562-5841, e-mail: ethics@uottawa.ca. There are two copies of the consent form: one for the athlete and one for the researcher/consultant.

Researcher/consultant's signature: _____ Date: _____
Participants signature: _____ Date: _____

Should you have any questions regarding this research project, please contact

Dr. Natalie Durand-Bush at: _____ OR _____ Jamie Collins at:

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Appendix D

*Interview Guide***PRE-INTERVENTION INTERVIEW***Individual Interview with the Coach:*

- How did you first get into curling/coaching? What are some of the highlights of your career to date? What are your aspirations? (general introductory question to break the ice and establish rapport)
- What is the overall nature of this team? How would you describe the team dynamics? How do these dynamics impact team success (e.g., probe for issues of cohesion and communication)?
- How would you describe your relationship with one another on this team? Describe your relationships outside of a performance context.
- Can you talk about the cohesion on this team? What is important to you regarding cohesion?
- Are there any norms (set of expected behaviours) in place for this team (i.e. for productivity, attendance, support etc)?
- If you were to consider all of the commitments and priorities in your life, where would this team and your athletic performance/success fall?
- Can you describe some of the demands that are placed on you, as an elite curling coach?
- Would you say that how you feel affects how you perform, both individually and collectively? If so, how?
- How aware are you of how your athletes feel in practice and competitions? Does how they feel affect how you feel? Does it affect your performance?
- What does 'feel' mean to you? How do you define it (i.e., probe for physical, cognitive, emotional, social, and spiritual dimensions)?
- How do you define performance and what differentiates optimal from sub-optimal performance? (Relate to feel).
- How committed are you to working on sport psychology as a team? What kind of mental training have you had prior to this study?
- Do you have anything to add with regards to team dynamics, performance, or cohesion?
- Do you have any questions regarding the study?

INTERVENTION SESSIONS

Session 1

Group Session (Athletes and Coach):

- Think of a situation when, as a team, you performed to the best of your ability. How did you feel, what did you think, and what did you do in the time leading up to that performance, during, and afterwards?
- Now think of a situation when, as a team, you performed poorly. How did you feel, what did you think, and what did you do in the time leading up to that performance, during, and afterwards?
- Let's do a bit of brainstorming. The point of this exercise is to see how each person wants to feel in the context of this team to perform optimally. How do you want, or need, to feel in practice in order to benefit the most from your training? Does how you want to feel in practice differ from how you want to feel in competition? Are there any discrepancies between how each of you wants to feel in practice and competition and how you normally feel?
- How often do you feel the way you want during practice and games? What are some strategies that you currently use, both individually and as a team, to feel the way you want? Are they effective? Explain.
- Do you want to feel a certain way as a team? How would you say you want to feel as a team to perform at your best in training and competitions?
- What unique contribution does each member of this team bring to the group? How, based on what you bring to the group, can each person contribute to the achievement of your desired team feel?
- What are the most challenging individual and team obstacles that you foresee in the upcoming season, and what can you do as a team in order to prepare for them and respond to them?

Individual Sessions with the Coach:

- What was your overall opinion of the intervention session?
- What did you learn from the session (i.e. about yourself and your athletes)?
- Is there anything with regards to your coaching that you will continue to do, or do differently, based on what was revealed during the group session?
- Do you have any questions, concerns, or suggestions for the next group session?

Remaining Sessions (2-8):

Purpose: To help the athletes and coach take control of and regulate how they feel in order to feel the way they want as often as possible and perform to their full potential. The content that will be discussed in these sessions will be based on the components of the RPM, however it will also be dependent on the lived experiences of the team at the time of the intervention. As such, an interview guide will be prepared in the weeks leading up to these sessions, and will be based on relevant team issues (e.g., upcoming tournaments, fatigue, communication or cohesion problems etc.), and topics addressed during the previous session(s).

- It has been two weeks since our last group session. Tell me about the past two weeks - how you have felt, how you have performed as a team, and how cohesive or not you have been.
- If you had to estimate a percentage, what percentage of the time did you feel the way you wanted in practice, competition, and in your general daily life? What interfered with you consistently feeling the way you wanted? Did you make any effort to take control of your felt experiences? Explain.
- Since our last session, what has been your most resonating moment(s) as a team? What can you learn about your team by reflecting on this moment/experience?
- Can you contrast this high point with your least resonating moment(s), that is, your team 'low(s)'. What was different about this experience? How did you feel? Was this situation/experience within your control? How did you respond to it? Did you do anything to help you reconnect with your desired team feel? What can you learn from this experience?

Appendix E

Post-Intervention Questionnaire

In order to help us wrap up the research, please answer the following questions to the best of your ability and with as much detail as possible.

By participating in a sport psychology intervention these last five months:

a) To what extent were you able to feel the way you wanted?

INDIVIDUALLY

At the beginning of the season

1	2	3	4	5	6	7
not at all			moderately			completely

At the end of the season

1	2	3	4	5	6	7
not at all			moderately			completely

Please explain why and how.

AS A TEAM

At the beginning of the season

1	2	3	4	5	6	7
not at all			moderately			completely

At the end of the season

1	2	3	4	5	6	7
not at all			moderately			completely

Please explain why and how.

b) To what extent were you able to think the way you wanted?

At the beginning of the season

1	2	3	4	5	6	7
not at all			moderately			completely

At the end of the season

1	2	3	4	5	6	7
not at all			moderately			completely

Please explain why and how.

c) To what extent were you able to behave / act the way you wanted?

At the beginning of the season

1	2	3	4	5	6	7
not at all			moderately			completely

At the end of the season

1	2	3	4	5	6	7
not at all			moderately			completely

Please explain why and how.

d) To what extent were you able to self-regulate (i.e., exert control over your thoughts, actions, and how you felt) (ex. when feeling frustrated, you were able to take control and change that feeling to something more positive or useful)?

At the beginning of the season

1	2	3	4	5	6	7
not at all			moderately			completely

At the end of the season

1	2	3	4	5	6	7
not at all			moderately			completely

Please explain why and how.

e) To what extent were you able to develop strategies that helped you regulate your thoughts, actions, and how you felt? (ex. talking more positively to yourself and teammates helped you to have more productive thoughts and feel more confident).

At the beginning of the season

1	2	3	4	5	6	7
not at all			moderately			completely

At the end of the season

1	2	3	4	5	6	7
not at all			moderately			completely

Please explain any strategy you have used.

f) To what extent were you able to anticipate and overcome obstacles that interfered with your performance and well-being (ex. feeling the way you wanted)?

At the beginning of the season

1	2	3	4	5	6	7
not at all		moderately				completely

At the end of the season

1	2	3	4	5	6	7
not at all		moderately				completely

Please explain how you overcame obstacles.

g) To what extent was the team cohesive (ex. had great communication, functioning and relationships)?

At the beginning of the season

1	2	3	4	5	6	7
not at all		moderately				completely

At the end of the season

1	2	3	4	5	6	7
not at all		moderately				completely

Please explain.

h) To what extent did the sport psychology intervention enhance your performance?

INDIVIDUALLY

1 2 3 4 5 6 7
not at all moderately completely

Please explain why and how.

AS A TEAM

1 2 3 4 5 6 7
not at all moderately completely

Please explain why and how.

i) To what extent did the sport psychology intervention enhance team cohesion?

1 2 3 4 5 6 7
not at all moderately completely

Please explain why and how.

j) What did you like and/or dislike about the sport psychology intervention? If you were to participate in a similar intervention next year, is there anything you would like to change?

THANKS!!!