

**Investigating High Performance Perfectionist Athletes' Perceptions of the Junior to Senior
Sport Transition**

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Abstract

Whether or not perfectionism is a healthy personality characteristic is a topic of much debate among researchers (Flett & Hewitt, 2005). One way to investigate this is to differentiate how “healthy” or “unhealthy” perfectionists perceive achievement demands. During their athletic careers, athletes experience the achievement demands of transitioning to higher levels of performance. One of the most demanding of these transitions is the junior to senior sport transition. As of yet, there is no research regarding how perfectionists experience and perceive the junior to senior sport transition. Therefore, the purpose of this study was to explore how healthy and unhealthy perfectionist athletes experience the transition from junior to senior sport. This study employed a sequential mixed method design. In step 1, 27 current and former members of a high-performance cross-country skiing training program completed the *Sport Multidimensional Perfectionism Scale-2* (Sport-MPS-2: Gotwals & Dunn, 2009), and coaches rated the athletes’ respective levels of perfectionistic strivings and perfectionistic concerns. Using intra-sample and inter-sample criteria scores for the Sport-MPS-2, and the coaches’ ratings, the athletes were designated as either healthy perfectionists, unhealthy perfectionists, or non-perfectionists. However, these characterizations did not yield a sufficient number of participants to compare healthy and unhealthy perfectionists. Therefore, the focus of the study was redirected toward athletes with high perfectionistic strivings, which is one of the overarching dimensions of perfectionism (Stoeber & Otto, 2006). In step 2, using an open-ended interview guide, six athletes who met the criteria of high perfectionistic strivings were interviewed regarding their respective experiences and perceptions of the junior to senior sport transition. Inductive thematic analysis was used to analyze the qualitative data. Eight themes emerged from the analysis: Balancing Priorities, Expectations as National Training Program Skiers,

Overthinking and Overdoing, Team Dynamics, Competition, Poor Performance and Related Emotions, Negative Effects of Training, and Hindsight. These themes are contextualized within the stress process, the athletic career transition literature, and the perfectionism literature. The implication of this study is that perfectionistic strivings should be accounted for during the junior to senior sport transition.

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Investigating High Performance Perfectionist Athletes' Perceptions of the Junior to Senior Sport Transition

The importance of psychological skills training for a high performance athletic career is well-documented (Griffith, 1928; Ogilvie & Tutko, 1966; Yates, 1957). Each athlete is different and, as a consequence, psychological skills training is individualized. Athletes with different personality characteristics require different psychological skills to achieve sporting success (Andersen, 2005; Karageorghis & Terry, 2011; Murphy, 2005). Perfectionism is one such personality characteristic. Frost, Marten, Lahart, and Rosenblate (1990) defined perfectionism as, “the setting of excessively high standards of performance in conjunction with a tendency to make overly critical self-evaluations” (p. 450). The subject of much controversy, researchers debate whether perfectionism is an unhealthy characteristic, or whether it might be healthy for some contexts (Flett & Hewitt, 2005). One way to investigate this is to study how perfectionists react to demands. Athletes typically experience a high degree of demands as they transition between stages of their career (Wylleman & Lavallee, 2004). Therefore, the general aim of this study was to advance the healthy versus unhealthy perfectionism debate by exploring perfectionistic athletes' perceptions of their transition to a new stage of their athletic career.

Perfectionism: Dimensions and Orientations

Stoeber and Otto (2006) contend that perfectionism is comprised of two overarching dimensions: Perfectionistic Strivings and Perfectionistic Concerns. Perfectionistic Strivings reflect the setting of very high personal standards of performance and a personal drive to achieve perfection; Perfectionistic Concerns reflect concerns about personal mistakes committed during performance, perceptions of others' expectations and criticisms as significant sources of pressure, and feelings of unacceptable discrepancies between one's desired and actual

performance level. According to Stoeber and Otto, three perfectionist orientations can be identified when Perfectionistic Strivings and Perfectionistic Concerns are considered simultaneously. Healthy perfectionists are characterized by high Perfectionistic Strivings in combination with low Perfectionistic Concerns. Unhealthy perfectionists are characterized by high levels across both dimensions. Non-perfectionists are characterized by low Perfectionistic Strivings in combination with undifferentiated Perfectionistic Concerns.

Research regarding how perfectionists appraise and react to achievement demands includes theorists', researchers', and practitioners' anecdotal accounts of perfectionism. For example, according to Hamachek (1978) and Lundh (2004)¹, healthy perfectionists' appraisals of, and reactions to, achievement demands stem from their tendencies to a) set high standards of performance in response to an internal drive for perfection and b) separate achievement of those standards from their perceptions of self-worth. That is, although healthy perfectionists have an intrapersonal drive for perfect performance in achievement contexts, they can maintain a high sense of self-worth even when this standard is not achieved. According to Hamachek (1978), this tendency has three important ramifications: First, healthy perfectionists tend not to be overly concerned about the possibility, or actuality, of committing personal mistakes during performance. Second, healthy perfectionists can derive satisfaction from their efforts to reach

¹ Hamachek (1978) and Lundh (2004) actually referred to *normal perfectionism* and *positive perfectionism*, respectively. Within this study, the label *healthy perfectionism* will be used in place of Hamachek's and Lundh's labels given that—in comparison to “normal” and “positive”—the adjective “healthy” more accurately describes the characteristics, processes, and outcomes associated with, and orientation defined by, high levels of Perfectionistic Strivings and low levels of Perfectionistic Concerns (Stoeber 2011; Stoeber & Otto, 2006). Similarly, Hamachek (1978) and Lundh (2004) referred to *neurotic perfectionism* and *negative perfectionism*, respectively. Within this study, the label *unhealthy perfectionism* will be used.

perfect performance, even if that standard is not achieved. Third, while healthy perfectionists enjoy significant others' approval of their performance efforts, this approval is not used to define their sense of self-worth and value. As a result, healthy perfectionists are likely to appraise achievement demands as personally meaningful, but not self-defining, and as challenges, but not threats (McGrath, 1970). Such appraisals allow healthy perfectionists to enter achievement contexts, "excited, clear about what needs to be done, and emotionally charged" (Hamachek, 1978, p. 28).

Like healthy perfectionists, unhealthy perfectionists also set perfection as their standard for personal performance (Hamachek, 1978). Unlike healthy perfectionists, though, unhealthy perfectionists a) feel that this performance standard is imposed on them by significant others and b) base their self-worth on achievement of this standard (Hamachek, 1978; Lundh, 2004).

However, perfect performances are rarely—if ever—achieved (Greenspon, 2000). This fact, in combination with the ramifications of imperfect performance on self-worth, has three important consequences: First, unhealthy perfectionists tend to fear the prospect of committing mistakes in achievement settings. Second, unhealthy perfectionists are rarely satisfied with the quality of their efforts. Third, unhealthy perfectionists tend to be overly sensitive to significant others' criticisms. This leads unhealthy perfectionists to perceive and appraise achievement demands very differently than healthy perfectionists. To unhealthy perfectionists, achievement demands represent a test, not only of their abilities, but of their worth as a person. As a result, it is not surprising that Hamachek (1978) described unhealthy perfectionists as being "anxious, confused, and emotionally drained" (p. 28) in achievement settings.

Most perfectionism researchers and theorists agree that perfectionism is an unhealthy personality characteristic. Studies of athletes report that perfectionism is associated with anxiety

(Hall, Kerr, & Matthews, 1998) and low self-esteem (Gotwals, Dunn, & Wayment, 2003).

However, there is debate as to whether perfectionism may be healthy, as researchers' opinions differ (Flett & Hewitt, 2005). Although perfectionism and high personal standards may seem to be healthy, Hall (2006) contended that over time, the demand for perfection is not healthy.

Greenspon (2000) argued that desiring excellence is different than striving for perfection, which is unattainable, and thus there is no "healthy perfectionism." Flett and Hewitt (2005) stated that the essence of perfectionism is maladaptive for athletes, promoting self-defeating and unhealthy behaviour. These perspectives contrast with recent studies of athletes that align with the anecdotal accounts of healthy perfectionism. Among samples of high performance athletes, those who are labelled as healthy perfectionists have reported lower levels of burnout symptoms (Gotwals, 2011) and achievement motivation avoidance goals (Gucciardi, Mahoney, Jalleh, Donovan, & Parkes, 2012), as well as higher levels of achievement motivation approach goals (Gucciardi et. al, 2012), and perceived parental authoritativeness (Sapieja, Dunn, & Holt, 2011) than those labelled unhealthy perfectionists.

Support for this healthy and unhealthy perfectionism debate can be produced by examining the degree to which anecdotal accounts of perfectionists' interpretations of, and responses to, achievement demands reflect perfectionist athletes' actual experiences in sport. Common demands experienced by all high performance athletes are those associated with a transition from a lower to a higher level of competition and training. Therefore, by exploring how healthy and unhealthy perfectionist athletes perceive, appraise, and respond to a transition experienced during their athletic careers, unique insight into perfectionism and sport transitions might be produced.

The Athletic Career and Transitions

A high performance athletic career can be defined as a “multiyear sport activity voluntarily chosen by the person and aimed at achieving his/her individual peak in athletic performance in one or several sport events” (Alfermann & Stambulova, 2007, p. 396). Wylleman, Alfermann, and Lavalley (2004a) advocate a whole person or holistic approach when studying the athletic career, because an individual’s experiences within sport interact with—and are impacted by—their experiences within other domains of development, such as the psychosocial, psychological, and academic/vocational domains. Additionally, it is important to note that high performance athletes tend not to describe their careers as one long continuous event, but rather as a series of stages bracketed by significant events (Wylleman, Alfermann, & Lavalley, 2004b). Researchers (Wylleman et al., 2004b; Wylleman & Reints, 2010) have distinguished between events that are normative, in that they are anticipated, expected, and/or predictable (e.g., the transition from high school sport to university sport, selection to the national team, and retirement from competitive sport), and events that are non-normative, in that they are unanticipated, unexpected, and/or unpredictable (e.g., suffering a significant/substantial injury, being unexpectedly traded to another team, and not being selected for the national team). The time periods surrounding these events are referred to as transitions, in that they result in “a change in assumptions about oneself and the world and thus [require] a corresponding change in one’s behaviour and relationships” (Schlossberg, 1981, p. 5).

Using athletes of different sports, ages, and skill levels, researchers (e.g., Stambulova, 1994; Wylleman & Lavalley, 2004) have studied and described the transitions of the athletic career. Transitions represent difficult, trying, and stressful times as athletes are demanded to face discrepancies between who they are, who they want to be, and who they are expected to be

(Alfermann & Stambulova, 2007). The transition might be reinforced as a crisis by objective obstacles (e.g., a lack of proper training conditions), improper behaviour by a coach and other people toward the athlete (e.g., autocratic pressure to perform), and specific personality characteristics of the athlete (e.g., dependency and passivity). Due to the demands and crises encapsulated by transitions, athletes often experience decreased self-esteem, increased emotional discomfort (e.g., anxiety, doubts, fear, and/or guilt), increased sensitivity to failure, and disoriented decision-making (Stambulova, 1994). Those who effectively cope with the demands inherent to a transition are those who are more likely to progress successfully to the next higher level of their athletic career. Athletes who do not successfully navigate a transition face less positive outcomes, including premature exit from high performance sport, injuries and illnesses, and even personal degradation through drug use, alcohol use, or crime (Stambulova, 1994).

The Junior to Senior Sport Transition

One of the most demanding transitions in the athletic career occurs when athletes progress from junior sport to senior sport (Wylleman & Reints, 2010). This transition typically occurs at the age of 16-18 years, lasts approximately 2.1 years (Wylleman & Reints, 2010), and may coincide with a high school to university transition (Wylleman & Lavallee, 2004). However, age of occurrence, duration, and accompanying contextual experiences may differ depending on the sport at hand, the cultural context, and the skill level of the athlete. Over this transition, one in two athletes will encounter financial difficulty, injury and self-doubt (Oldenziel, Gagne, & Gulbin, 2003). Bussman and Alfermann (1994) contended that only one in three qualified junior athletes successfully transitioned to senior sport. However, there is evidence that this success rate might be an overestimation. For example, Vanden Auweele, De Martelar, Rzewniki, De Knop, and Wylleman (2004) interviewed 167 Belgian 14-18 year old junior national champion track

and field athletes before the transition from junior to senior sport and five years after that transition. Only 17% of these junior national champions became members of senior national teams. This percentage is considerably lower than that proposed by Bussman and Alfermann. Of those athletes who did not become senior national team members, 31% did not progress to senior sport and later only performed at a recreational level, 28% could not maintain status as senior athletes, and later competed irregularly, and 24% dropped out of their sport altogether.

As advocated in Wylleman and Lavallee's (2004) holistic model of sport transitions, a description of the sport context prior to, and after, the transition from junior to senior sport illustrates the myriad of significant demands that athletes face during this time period. Junior athletes are at the beginning of sport specialization. They may participate in local or provincial high achievement amateur sport competitions. Junior athletes are often high school students who live at home and are influenced by a number of significant others, including peers, coaches, and parents (Wylleman & Lavallee, 2004). Athletes who are poised to make the transition to senior sport are often the oldest of their peers, the most talented, and the most successful (Wylleman & Reints, 2010).

Life changes drastically when junior athletes make the transition to senior sport. As senior athletes, they are now asked to compete as semi-professionals, at the national or international level (Wylleman & Reints, 2010). The pressure to perform is heightened, as financial reward may come with performance. This transition may also coincide with the transition to university necessitating that the athlete balance increased training times with advanced academic requirements (Wylleman & Lavallee, 2004). Senior sport might require the athlete to move away from home (Wylleman & Reints, 2010). In this case, although parents and peers remain influential, the coach plays a major role in the athletes' life, determining

scheduling, training, and playing time (Wylleman & Lavallee, 2004). The athletes who were most talented as juniors are now rookie senior athletes; thus their performance may no longer compare relatively well with that of their senior peers, nor meet their own personal expectations (Wylleman & Reints, 2010).

As first-year seniors, these athletes must contend with demands of the transition to senior sport. They must balance their goals for sport with their goals for life, such as being a successful athlete while pursuing an education. Athletes may realize that modeling themselves after other athletes will not better their performance, and that they must create their own individual style for their sport, such as personalized training and competition schedules. They are met with the pressure of selection for competitions, prestigious training centres, or teams, and of using different strategies to contend with the increased demands of their sporting schedule. They desire approval and recognition from people in prestigious positions of authority (e.g., coaches and judges), pursue the rewards associated with good performance (e.g., ranking points, increased playing time, and sponsorship), and strive for a sense of glory as senior athletes. As athletes navigate the demands associated with the transition to senior sport, they might encounter relationship issues with those who are influential to them, like coaches, athlete peers, and parents (Stambulova, 1994).

MacNamara and Collins (2010) produced empirical support for the described accounts of the junior to senior sport transition. Specifically, MacNamara and Collins interviewed six members of a high performance track and field talent development program, as well as other individuals that played significant roles in the athletes' track and field career (e.g., coaches, parents, and managers), to gain insight into the athletes' experiences during the transition from high school to university. Using Wylleman and Lavallee's (2004) holistic model of sport

transitions, MacNamara and Collins (2010) organized the demands faced by the athletes into categories reflecting the athletic, academic-vocational, and psychosocial domains. Demands within each category reflected those described by Stambulova (1994), and Wylleman and Reints (2010). For example, demands categorized within the athletic domain included being in a new training group, new training and competition standards, and a new coach. Demands categorized within the academic-vocational domain included the pressure of balancing schoolwork with their sport. Demands categorized within the psychosocial domain consisted of negotiating different relationships with their parents and creating new friendships. More specifically, there was less influence by the athletes' parents and it was not easy to maintain friendships with peers who were not athletes.

Perfectionism and Transitions

When theorists' descriptions of healthy and unhealthy perfectionism (e.g., Hamachek, 1978; Lundh, 2004) are considered alongside researchers' descriptions of the athletic career (e.g., Stambulova, 1994; Wylleman & Lavallee, 2004), there is evidence to suggest that healthy perfectionist athletes and unhealthy perfectionist athletes should have different cognitive, emotional, and behavioural experiences during the transition from junior to senior sport. For instance, healthy perfectionists' tendency to separate achievement of perfection from perceptions of self-worth (Lundh, 2004) should diminish the saliency of demands related to heightened performance expectations and the pressure of being selected to prestigious teams/training centres. In contrast, unhealthy perfectionists' tendency to define self-worth by the achievement of perfection (Hamachek, 1978) should increase the meaningfulness of these same demands. Similarly, healthy perfectionists tend not to perceive significant others as being overbearing or inappropriately critical (Hamachek, 1978). This tendency should diminish the possibility of

conflict between healthy perfectionist athletes and those who play influential roles during the junior-to-senior sport transition (coaches, parents, and teammates; Wylleman & Lavallee, 2004). In contrast, unhealthy perfectionists are highly sensitive to the expectations and criticisms of others and, as a result, should be more prone to conflict with significant others during this transition. When these respective characteristics are considered simultaneously, it is clear that according to theory, healthy perfectionist athletes should be better equipped to positively and successfully navigate the demands associated with the junior-to-senior sport transition than unhealthy perfectionist athletes.

Despite these clear theoretical ties, there is no research investigating how perfectionist athletes experience a junior-to-senior sport transition, or for that matter, any transition of their athletic career. However, Speirs Neumeister, Williams, and Cross (2007) did investigate perfectionist high school students' transition from a public high school to a school for the academically gifted. There are several similarities between the transition that the students in Speirs Neumeister et al.'s study experienced and the transition that athletes experience as they move from junior sport to senior sport. For instance, both have to cope with the demands related to increased performance expectations, less positive performance comparisons with peers, and change in significant others' influence. As such, Speirs Neumeister et al.'s study may provide some insight into how perfectionist athletes experience the transition from junior to senior sport.

Speirs Neumeister et al. (2007) adopted a two-step process to identify participants for their study. In the first step, 293 students at the school for the academically gifted completed the *Multidimensional Perfectionism Scale* (HF-MPS; Hewitt & Flett, 1991), which assesses three facets of perfectionism: self-oriented perfectionism (demanding perfection of oneself), other-oriented perfectionism (demanding perfection of others), and socially-prescribed perfectionism

(perceiving that others demand perfection of oneself). In the second step, those students who scored higher than one standard deviation above the mean on one or more of these three facets were recruited to be interviewed about their experiences transitioning between the two schools. More specifically, students who scored higher than one standard deviation above the mean on one or more of the HF-MPS subscales were rank ordered; these students were then sequentially asked to participate in subsequent interviews, starting with those who had the highest scores on any subscale. Fifteen perfectionist students at the school for the academically gifted agreed to be interviewed.

Speirs Neumeister et al.'s (2007) findings revealed that the students' perfectionism levels changed after transitioning from the public school to the school for the academically gifted. For instance, some of the socially prescribed perfectionist students became more perfectionistic due to a desire to perform well and a tendency to model other students perceived to be perfectionists. Some of the self-oriented perfectionist students also became more perfectionistic when they first began at the school for the academically gifted. However, their adherence to perfectionism decreased as they realized the imperfections in their peers' performances. Collectively, though, students' perfectionism levels decreased due to the fact that teachers did not use GPA to rank students, the abilities of the student body were relatively homogenous, and the school was residential, thus diminishing parental influence.

Speirs Neumeister et al.'s (2007) study highlights the importance of taking individuals' relevant personality characteristics into account when investigating how those individuals experience demanding life transitions. However, the study provides limited insight into how athletes' healthy or unhealthy perfectionist tendencies specifically influence their transition experiences. To identify perfectionists as healthy or unhealthy, their profile of scores across

Perfectionistic Strivings and Perfectionistic Concerns must be considered. Healthy perfectionists have high Perfectionistic Strivings in combination with low Perfectionistic Concerns; unhealthy perfectionists have high levels across both dimensions (Stoeber & Otto, 2006). With regard to the HF-MPS, Self-Oriented Perfectionism and Socially Prescribed Perfectionism are generally considered core facets of Perfectionistic Strivings and Perfectionistic Concerns, respectively. (Other-Oriented Perfectionism is generally not considered a relevant facet of either dimension; Stoeber & Otto, 2006.) Along these lines, healthy perfectionists would be defined by a combination of high scores for Self-Oriented Perfectionism and low scores for Socially Prescribed Perfectionism; unhealthy perfectionists would be defined by high scores for both subscales.

Speirs Neumeister et al. (2007) used the HF-MPS to assess students' perfectionism levels, and asked students who scored high on any subscale to participate in their study. Over half of the selected participants scored high for only one of the subscales and their scores for other subscales were not reported. Therefore, some of these students may have been healthy perfectionists, although there is no way to say this definitively based on the information in Speirs Neumeister et al.'s study. The remainder of the participants scored high for two or more subscales. Some of these students displayed a profile in line with unhealthy perfectionism, while others could have been healthy perfectionists had their scores for other subscales been provided. However, the study did not distinguish between healthy perfectionistic and unhealthy perfectionistic students, and did not associate findings with a specific profile. Thus there is no way to determine which findings may have pertained to students who qualified as healthy perfectionists or unhealthy perfectionists. Therefore, there is little insight as to how healthy and unhealthy perfectionistic athletes' experiences of a sport transition might differ.

The Present Study

The purpose of this study was to explore how healthy and unhealthy perfectionist athletes experience the transition from junior to senior sport. Based on links between anecdotal accounts of healthy and unhealthy perfectionism (e.g., Hamachek, 1978; Lundh, 2004) and descriptions of the demands faced by athletes during the transition from junior to senior sport (Stambulova, 1994; Wylleman & Lavallee, 2004), healthy perfectionist athletes are expected to experience this transition in a more positive manner, and cope with the inherent demands more successfully when compared to unhealthy perfectionist athletes. This research addressed several gaps in the literature. For example, there are ongoing calls for research that investigates the degree to which perfectionism is healthy and unhealthy (Gotwals, Stoeber, Dunn, & Stoll, 2012). Additionally, Wylleman, Alfermann, and Lavallee (2004) state that the study of sport career transitions is required for resources to be available during an athlete's career. As a result, findings from this study may have multiple benefits. Not only may they help resolve the debate surrounding healthy and unhealthy perfectionism, but they may also prove useful in sport psychology practitioners' efforts to help perfectionist athletes successfully navigate athletic career transitions.

Method

Design and Theoretical Perspective

Achieving this study's purpose required the implementation of two methodological steps. The first step focused on the identification of a sample of healthy perfectionistic athletes and unhealthy perfectionistic athletes who had gone through the transition from junior to senior sport. In line with past research (e.g., Rice, Bair, Castro, Cohen, & Hood, 2003; Speirs Neumeister et al., 2007), this study identified such perfectionists by (a) identifying a population of athletes who at some point had gone through the junior to senior sport transition, (b) asking individuals from

that population to respond to a self-report instrument that quantified their perfectionism levels, and (c) comparing the individuals' questionnaire scores to pre-determined quantitative criteria. The second step focused on investigating the identified perfectionists' perceptions of their respective experiences through the transition from junior to senior sport. Consistent with Denzin and Lincoln (1998, p.3), qualitative inquiry was deemed necessary (or most appropriate) for this step as the goal was, "to [make] sense of, or interpret, phenomena in terms of the meanings people bring to them." Through qualitative inquiry, this study obtained rich description in an attempt to contribute to the understanding of how perfectionistic athletes experience the junior to senior sport transition.

The two methodological steps in this study reflect a mixed methods design (Tashakkori & Teddlie, 2010). According to Tashakkori and Teddlie (2010), mixed methods designs are appropriate when the research question is "an overarching question that potentially requires a structured quantitative approach *and* an emergent and holistic type of approach" (p. 18). In response, quantitative and qualitative data are collected and analyzed within the same study (Cresswell & Plano Clark, 2011). This is referred to as methodological eclecticism, where an "either-or" approach to research is rejected and a phenomenon is investigated by selecting and integrating the most appropriate techniques from both quantitative and qualitative inquiry. This study specifically adopted a sequential mixed methods design in that quantitative methods were used first to identify potential participants, and then qualitative methods were used to interview those participants (Tashakkori & Teddlie, 2010).

Mixed methods research is not necessarily guided by a single theoretical perspective (defined as "the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria;" Crotty, 1998, p. 3). Rather, a mixed method

study may utilize different theoretical perspectives in different phases of the study (Cresswell & Plano Clark, 2011). This is referred to as paradigm pluralism (Tashakkori & Teddlie, 2010) and was evidenced in this study as the two methodological steps were grounded in two different theoretical perspectives. Although in-depth descriptions are beyond the scope of this paper, it is useful to note how central characteristics of these two theoretical perspectives are inferred within this study's two methodological steps.

Step 1, the quantitative phase of the present study, was guided by a post-positivist theoretical perspective. This theoretical perspective is founded on assumptions that entities exist independent from experience or consciousness, that characteristics of these entities are best expressed quantitatively, and that the truth and meaning inherent to these entities can be objectively perceived (Crotty, 1998). These assumptions are implied in the present study in that athletes' perfectionism levels were viewed as independent entities awaiting assessment, self-report instruments with constrained numerical response formats were deemed the best way to conduct these assessments, and the resulting scores could be determined and quantitatively compared in an objective manner. Step 2, the qualitative inquiry phase, was guided by a constructivist theoretical perspective. In contrast to post-positivism, this theoretical perspective is founded on the assumption that reality is subjective, that truth and meaning are social creations influenced by individuals' unique perspectives, their interactions with others, and their histories, and that these social creations can be communicated through linguistic discourse (Crotty, 1998). These assumptions are implied in the present study in that, although each identified perfectionistic athlete experienced the transition from junior to senior sport, each perceived and interpreted their transition in a subjective manner. To capture these perceptions, interviews were conducted in an open-ended manner allowing participants freedom to express their own

subjective perceptions of truth. However, it is also recognized that the researcher's own social history influenced the flow of these interviews as well as subsequent analysis of the resulting qualitative data. Consequently, the results of this analysis are presented as socially-constructed entities that cannot be separated from the subjective and unique perspectives of the observer and the observed.

Participants

Step 1: Identifying perfectionistic athletes. A total of 27 participants (21 males, 6 females, $M_{\text{age}} = 24$ years, $\text{range} = 18\text{-}34$ years) took part in the first step of the present study (i.e., the step focused on identifying perfectionistic athletes who experienced the junior to senior sport transition). The participants were current and former members of a national training program for cross-country skiing. The former members were in the program for at least one year during the past nine years. Over this time period there were two head coaches, the first of whom led the team for eight seasons, and the second for one season.

The national training program was chosen as an appropriate context for the present study because it was assumed that skiers in this program experienced the transition from junior to senior sport in their first one to two years in the program. This assumption is supported by a high degree of similarity between characteristics of the program and characteristics of the junior to senior sport transition (as identified in the literature; see Stambulova, 1994; Wylleman & Lavallee, 2004; Wylleman & Reints, 2010). For example, the purpose of the program is to offer high performance training and competition opportunities to cross-country skiers. Prior to being at the national training program, these athletes were members of their local club or high school ski teams, and were selected to the training program by high national performance criteria. The athletes are 18-20 years of age when they start the program, and are oftentimes required to live

away from home and their parents. They are semi-professional, in the sense that they are often funded and skiing is their number one priority and primary occupation. Given that the characteristics of the national training program closely mirrored characteristics of the junior to senior sport transition, it was believed that athletes from this program could serve as information-rich sources for an exploration of this transition.

Step 2: Exploring perfectionistic athletes' experiences of transition. Of the 27 skiers who took part in Step 1, seven met criteria to take part in the second step of the present study (i.e., the step focused on exploring perfectionistic athletes' perceptions of the transition from junior sport to senior sport). However, one of these athletes did not agree to take part. Therefore, six skiers (5 males, 1 female) ultimately participated in Step 2. Table 1 presents demographic information pertaining to these skiers' gender, age, and years of competitive experience in skiing.

Instruments

The instruments that were used across the two steps of this study are described below. The demographic questionnaire, perfectionism questionnaire, contact information sheet, and coach rating form were used in Step 1, and the interview guide was used in Step 2.

Demographic questionnaire. A demographic questionnaire (see Appendix A) was used to assess the athletes' age, gender, years of competitive experience in cross-country skiing, when they became members of the training program, and whether they were current or former members of the training program.

Perfectionism questionnaire. Because people's perfectionist tendencies differ across contexts, a domain specific measure is more useful than a global measure when studying perfectionism within a specific context (Dunn, Gotwals, & Causgrove Dunn, 2005; Gotwals,

Dunn, Causgrove Dunn & Gamache, 2010). As a result, this study used the *Sport Multidimensional Perfectionism Scale-2* (Sport-MPS-2: Gotwals & Dunn, 2009) to assess participants' perfectionistic tendencies. Responses to the Sport-MPS-2's Personal Standards and Concern Over Mistakes subscales were specifically used to help identify athletes who qualified as perfectionists. These two subscales were chosen because they are considered to respectively represent core facets of Perfectionistic Strivings and Perfectionistic Concerns (Stoeber, 2011). There are seven items in the Personal Standards subscale (e.g., "I think I expect higher performance and greater results in my daily sport-training than most players"), and eight items in the Concern Over Mistakes subscale (e.g., "If I do not do well all the time in competition, I feel that people will not respect me as an athlete"). Each item is assessed through a five-point Likert scale, where 1 = *strongly disagree* and 5 = *strongly agree*. Higher scores reflect higher levels of each subscale item.

There is a substantial amount of reliability and validity evidence that supports the Sport-MPS-2 as a measure of athletes' perfectionistic tendencies toward sport. Studies report acceptable internal consistency (e.g., $\alpha \geq .70$) for each subscale of the Sport-MPS-2 (Gotwals & Dunn, 2009). Additionally, the structure of each subscale has been upheld in sport-based studies using factor analytic techniques (Gotwals & Dunn, 2009; Gotwals et al., 2010).

The versions of the Sport-MPS-2 Personal Standards and Concerns Over Mistakes subscales used in this study were modified from their original format and administered in a different manner than usual. The Sport-MPS-2 was originally designed to assess team-sport athletes' perfectionistic tendencies. As the present study is specific to cross-country skiers, which is an individual sport, the items of the Sport-MPS-2 were modified to pertain to a cross-country skiing context (e.g., the item "I think I expect higher performance and greater results in my daily

sport-training than most players” was revised to read “I think I expect higher performance and greater results in my daily training than most skiers”). Twelve of the 15 items from the Personal Standards and Concern Over Mistakes subscales required modification. Additionally, the instructions in the Sport-MPS-2 ask athletes to complete the questionnaire in regards to their current team. Because this study was aimed at investigating skiers’ first one to two years in the national training program, the instructions for the instrument were revised. Specifically, athletes were asked to base their responses on the perspective towards skiing that they had in their first 1 - 2 years in the program. Finally, the Sport-MPS-2 was presented and completed electronically and in an unsupervised manner, while it is usually completed manually via pen and paper under the guidance of a member of the research team. Appendix B presents the revised version of the Sport-MPS-2 that was used in this study. To avoid any bias by the participants regarding the word “perfectionism,” and consistent with administration of the Sport-MPS-2, the title of the questionnaire was presented as Competitive Orientations Scale.

Contact information sheet. The contact information sheet (see Appendix C) informed athletes that they might or might not qualify to participate in a subsequent interview, indicated that the purpose of the interview would be to advance understanding of how athletes respond to transitions across their athletic career, and asked athletes if they would be willing to take part in such an interview. If respondents were willing, they were asked to provide their primary contact information.

Coach rating sheet. The current and previous coaches of the national training program were asked to rate the perfectionistic tendencies of each of their respective athletes. Using five-point Likert scales (1 = *Far Below Average*; 5 = *Far Above Average*) the coaches rated athletes’ levels of Perfectionistic Strivings and Perfectionistic Concerns in relation to the “broad spectrum

of athletes” that skiers in the national training program compete against across the race season (see Appendix D).

Interview guide. An interview guide consisting of open-ended guiding, probing, and follow-up questions was developed and utilized to guide the interviews conducted in Step 2. The guide addressed key issues concerning the junior to senior sport transition, such as commitments, financial issues, and influence of significant others (Oldenziel et al., 2003; Wylleman & Reints, 2010). Prior to data collection, three pilot interviews were conducted with non-national training program university skiers to improve and hone the researcher’s interview skills, to evaluate the usefulness of the guide, and to modify existing questions. Questions and probes were modified based on feedback from the pilot interview participants and discussions held with committee members upon review of the aural interview record. The final interview guide is presented in Appendix E. One version of the guide was used for all interviews.

Procedure

Prior to initiating participant recruitment, the present study gained approval from the Lakehead University Research Ethics Board, the executive board of the national training program, and the current coach of the national training program. Additionally, all participants were asked to provide signed informed consent prior to taking part in both steps of the study.

Step 1: Identifying perfectionist athletes. Upon ethical approval, the executive board of the national training program provided contact information for athletes and coaches. All athletes ($n = 38$) were emailed a description of the study (see Appendix F) and asked to consider participating in the study. If they were willing to participate they were asked to electronically complete the informed consent form (see Appendix G), the demographic questionnaire, the Sport-MPS-2 questionnaire, and the contact information sheet (which were all attached to the

email). Twenty-seven athletes provided consent to participate and sent copies of the completed files back to the researcher via email.

To gain coach ratings of the athletes' perfectionism levels, the student researcher met individually with the current coach and previous coach of the national training program. In this meeting the researcher described the purpose of the study and educated the coaches regarding Perfectionistic Strivings and Perfectionistic Concerns. Specifically, the researcher described and defined the two dimensions of perfectionism, using examples pertaining to cross-country skiing to illuminate this description, and answered any of the coaches' questions. The coaches were then asked to sign an informed consent form (see Appendix H) and to rate the perfectionism levels of the athletes that they each coached (see Appendix D).

Using analytical procedures outlined in the "Data Analysis" section, three athletes were identified as unhealthy perfectionists, and one was identified as a healthy perfectionist. These low numbers were deemed unsuitable to allow an appropriate juxtaposition of healthy and unhealthy perfectionistic athletes' perceptions of the junior to senior sport transition. More specifically, conducting a total of three interviews was unlikely to satisfy the goal to produce a rich description of participants' perspectives since themes would likely be poorly developed/saturated. However, seven athletes scored high for perfectionistic strivings, which is one of the two overarching dimensions of perfectionism. Perfectionistic strivings has been extensively studied in the sport psychology literature (for a review, see Gotwals et al., 2012). Most of this research has taken a variable-oriented approach, where researchers investigated relationships between perfectionistic strivings (as a variable) and various indices of healthy and unhealthy cognition, affect, and behavior. However, no study has examined how athletes with high levels of perfectionistic strivings experience the junior to senior sport transition. This

distinction is important because, to paraphrase Bergman, Magnusson, and El Khouri (2003, p. 26), it is athletes—as opposed to variables—who go through athletic career transitions. To address this gap in the literature, this thesis was reoriented towards a focus on athletes with high levels of perfectionistic strivings. Specifically, the study's purpose was revised to investigate how athletes with high perfectionistic strivings experience the transition from junior to senior sport. The seven athletes documented to have high perfectionistic strivings were contacted by the researcher via telephone and/or email and were asked to take part in an interview. Six athletes agreed to this request.

Step 2: Exploring perfectionistic striving athletes' experiences of transition. Using the interview guide, semi-structured interviews were conducted by the researcher with the athletes with high levels of perfectionistic strivings. Of the six interviews conducted, two occurred at a private room in the C.J. Sanders Fieldhouse of Lakehead University, two were conducted via Skype, and two were conducted via telephone (see Table 1). Athletes were asked to answer questions regarding their athletic career, and the transition to the national training program. The interviews were approximately one hour each in duration, recorded digitally, and subsequently transcribed by the researcher.

Data Analysis

Step 1: Identifying perfectionistic athletes. A purposeful sampling strategy (Patton, 2002) was used to identify perfectionists within the group of 27 athletes who submitted questionnaire data. Specifically, participants were identified as perfectionists if they qualified according to two out of three criteria established through (1) intra-sample comparisons, (2) inter-sample comparisons, and (3) coach ratings.

Norms for the Sport-MPS-2 have not been established. As a result, for the intra-sample

comparisons, individual athlete's scores for the Personal Standards and Concern Over Mistakes subscales were compared to percentile scores calculated from an aggregation of scores from all 27 athletes who took part in Step 1. Participants were deemed to qualify as unhealthy perfectionists if they scored at or above the 66th percentile for Personal Standards and Concern Over Mistakes and as healthy perfectionists if they scored at or above the 66th percentile for Personal Standards and at or below the 33rd percentile for Concern Over Mistakes (Rice et al., 2003). With regard to the revised focus of the study, participants were deemed to qualify as athletes with high perfectionistic strivings if they scored at or above the 66th percentile for Personal Standards.

For the inter-sample comparisons, athletes' scores for Personal Standards and Concern Over Mistakes were compared to percentiles based on means and standard deviations published in past research that sampled athletes. Relevant past research was identified through a process established by Gotwals et al. (2012). As a first step in this process, the PsycINFO and SPORTDiscus databases were used to identify published, peer-reviewed, empirical perfectionism studies whose abstracts contained the word stem "perfection*" and whose abstract contained the word stems "sport*" or "athlet*," or whose journal title contained the word stem "sport*." Studies were then cross-referenced with the researcher's and supervisor's article libraries to ensure all available studies were included.² There were 123 studies identified. To be included as a data source in the calculation of inter-sample criterion scores, studies were required to a) sample athletes, physical activity students, and/or students with a physical education or sport science major, and b) report mean scores for the Personal Standards and Concern Over Mistakes

² This aspect of this study was conducted as part of an external and ongoing project by Dr. John Gotwals and Ms. Lindsey Wachter.

subscales of the Sport-MPS or the Sport-MPS-2. Sixteen studies met these criteria.

Using the means and standard deviations that each study reported for Personal Standards and Concern Over Mistakes, a weighted mean and pooled standard deviation were calculated for each subscale. These scores were then used, in conjunction with z-scores associated with the 33rd and 66th percentile of the normal distribution, to calculate an inter-sample 33rd and 66th percentile score for each subscale. Each athlete's scores on the Personal Standards and Concern Over Mistakes subscales were then compared to these inter-sample percentiles scores. Similar to the intra-sample criteria described earlier, unhealthy perfectionists were defined as athletes who scored at or above the 66th percentile for Perfectionistic Strivings and Perfectionistic Concerns; healthy perfectionists were identified as athletes who scored at or above the 66th percentile for Perfectionistic Strivings and at or below the 33rd percentile for Perfectionistic Concerns. Athletes with high perfectionistic strivings were those who scored at or above the 66th percentile on Personal Standards.

For the coach ratings, athletes were deemed to qualify as unhealthy perfectionists if they were rated as "Above Average" or "Far Above Average" for Perfectionistic Strivings and for Perfectionistic Concerns; healthy perfectionists were athletes rated as "Above Average" or "Far Above Average" for Perfectionistic Strivings and "Below Average" or "Far Below Average" for Perfectionistic Concerns. Athletes with high perfectionistic strivings were those who scored "Above Average" or "Far Above Average" for Perfectionistic Strivings. For athletes who were members of the training program during both coaches' tenure, the mean ratings by the two coaches for Perfectionistic Strivings and Perfectionistic Concerns were used.

Step 2: Exploring perfectionistic striving athletes' experiences of transition.

Overall approach. Consistent with Braun and Clarke (2006), a thematic analysis was

conducted by adopting a semantic approach in which data were assessed for, and themes created from, “explicit or surface meanings of the data” (p. 84). Each theme was identified through a primarily inductive process at the onset (generated from the data collected) as opposed to being derived in a ‘theoretical’ (p.84) manner via a deductive process. However, further along in the process, analysis did consist of elements of induction and deduction as themes underwent refinement. This, “back and forth” is consistent with Braun and Clarke (2006) as well as others (e.g., Corbin & Strauss, 2007) and illustrative of the constant comparative method (Glaser & Strauss, 1967).

Creation of themes. All interview data were initially ‘broken apart’ by reviewing, and identifying, preliminary patterns and generating initial codes to describe them. Specifically, and consistent with Braun and Clarke (2006), passages deemed relevant and interesting were coded based on an interpretation of possible meaning(s). For example, during an interview, one athlete commented, “There's a lot more professionalism to it, you don't just show up to training and train and do your own thing, it's all planned.” These lines of text were coded as “Professionalism” within the transcript. This constituted the beginning of the data coding process.

After generating initial codes in the manner described above, analysis focused on the development of preliminary themes, and through constant comparisons (Glaser & Strauss, 1967) progressed to final theme development; aided by continuous refinement of codes and themes. In practice, and consistent with Braun and Clarke (2006), these processes involved compiling all data pertaining to each respective theme, examining all quotes within each theme to determine final membership as reflected by ‘key’ themes and selecting the most appropriate, compelling examples to illustrate the study’s main findings. For an example of this process, see Appendix I.

Trustworthiness

Morse, Barrett, Mayan, Olson, and Spiers (2002) argued that trustworthiness is maintained by things researchers do while conducting studies, as opposed to after a study is completed. So that the findings from this study can be viewed as credible, the verification strategies listed below have been built into this study's design.

Methodological coherence. The goal of methodological coherence is to ensure that the components of the method are congruent to the research focus (Morse et al., 2002). For this study, the focus was the perceptions of athletes with high perfectionistic strivings regarding the junior to senior sport transition. A sequential mixed method design was congruent with this focus because it allowed athletes with high perfectionistic strivings to be identified via quantitative techniques, and allowed for these athletes' experiences to be investigated via qualitative techniques.

Appropriate sampling. A sample is deemed appropriate when participants who best represent or have knowledge of the research topic have been included (Morse et al., 2002). As previously described, the characteristics of transitioning to the national training program are similar to the characteristics of the junior to senior sport transition. Therefore, the athletes who were recruited were knowledgeable about the junior to senior sport transition and were information-rich sources.

Concurrent data collection and analysis. According to Morse et al. (2002), "collecting and analyzing data concurrently forms a mutual interaction between what is known and what one needs to know" (p. 12). Interviews, transcription, and analysis of data for the qualitative step of this study were completed concurrently, rather than sequentially, e.g., the interviews being completed, then the transcription of each interview, then the analysis of each of the interview

transcripts. Although each interview used the same open-ended interview guide, this process allowed the researcher to review and be aware of the themes and key points of previous interviews before conducting the next one.

Results

Table 1 summarizes the pseudonym, gender, age, years of skiing experience, interview format, Sport-MPS-2 scores, and coach ratings for each athlete, and the 33rd and 66th percentile criterion scores for the intra-sample and inter-sample comparisons.

The National Training Program and the Junior to Senior Sport Transition

During the interviews, athletes provided relevant information comparing their respective previous teams with the national training program. Their descriptions align with the characteristics of junior and senior sport.

Junior. Prior to joining the national training program, the athletes were from different teams and from different parts of the country, although they were generally from local club or high school teams. Most of these teams required the athletes to attend team practices 2-3 days a week with one practice per day. However, the participants for this study all stated that even if the team commitment was not every day, they trained on their own an additional 3-4 days per week. The credentials of the coaches for these teams varied, with three athletes stating that their coaches were paid, while three athletes described their coaches as volunteers. Five of the athletes were living at home while members of these teams and were attending full-time high school or university. While skiing was a significant pastime, for most of the athletes it was not their number one priority. These athletes were at the top of their respective clubs, and poised to transition to senior sport.

Senior. The commitment level increased significantly for most athletes upon joining the

national training program. The intensity of training, compared to the junior level, also increased. It was now common for athletes to train twice a day, four hours a day, and every day of the week. They were expected to train together at designated times and places, and they attended numerous training camps nationally and internationally. When they were not training, athletes spent significant amounts of time thinking about skiing, attending team meetings, and completing training logs and journals. Skiing was now their number one priority.

Themes

Eight themes emerged from the analysis in relation to the research questions: Balancing Priorities, Expectations as National Training Program Skiers, Overthinking and Overdoing, Team Dynamics, Competition, Poor Performance and Related Emotions, Negative Effects of Training, and Hindsight. To protect the identity of participants, pseudonyms are used throughout.

Balancing priorities. Balancing priorities refers to the fact that as new national training program members, the athletes were now dedicating significantly higher amounts of time and energy to skiing. These demands required athletes to balance their new workload with their previous priorities, such as school, hobbies, and relationships with non-skiers. For some, this meant reorganizing their priorities.

With the full-time commitment of national training program, student-athletes who were previously attending school full-time and skiing on the side now saw these pursuits reversed. With skiing now a prime priority, athletes were required to attend school only part-time, if at all. For Jeff, who started university at the same time as joining the national training program, knowing how much energy to dedicate to each was difficult: “Stress started happening with school with actually realizing that I had invested too much energy up front and now was starting to burn out, but not being able to sort of back off and let myself adjust, so that’s when I would

get stressed out.” Ryan, who had previously attended university full-time, stated that skiing affected his academic performance: “I had a hard time with it, and I just kind of put school on the backburner. I still did OK, but nowhere near what I would’ve liked.” Tammy stated that prioritizing during the transition was perhaps based on interest: “If anything, my school probably wasn’t as great because of skiing. It was more skiing affecting school than school affecting skiing. It’s a little more exciting to ski than to do schoolwork.” For Steve, juggling school with his new commitment to skiing was too much of a burden: “I found that it was still a little bit too much and my school was suffering and I wasn’t learning, I wasn’t getting as much out of it as I would’ve liked to, so I just stopped and put school on hold.”

Every student-athlete, however, realized that attending school and being a member of the national training program was a balancing act of time and effort, and many of them expressed the benefits of simultaneously being students and skiers: “At school, yeah I would say that my number one focus was still skiing because it’s just what I love to do, but I still had my school to think about and how it gave me a break from skiing, and then skiing kind of gave me a break from school” (Tammy). Zak agreed, and thought that being a student eased his transition to the national training program: “School was a benefit to my skiing. Some people I know it was a hindrance to them, where they would’ve rather just focused on skiing, but I recognized that I needed more in my life than just skiing and only having skiing as a reflection of my success was a deterrent, and so having school on the side was also a benefit for me because I could disconnect from skiing to then provide value of what I was doing through the skiing and school, so it was a positive for me”.

However, with or without school, none of the skiers were able to dedicate time to other hobbies or activities during their transition to senior sport. Jeff said, “I was pretty much a two

track kind of guy. I was doing school and I was doing skiing, no I don't think I was doing a single other thing, honestly.” For some, like Brad, this was seemingly a choice to dedicate themselves fully to their sport: “If it's not going to make you faster don't do it, that kind of outlook, so I would just kind of sit around at home rest recover until the next workout and then go again.” As a rookie, Ryan felt this was a common mindset of the team: “I kind of got sucked into it that to be a good skier you shouldn't do school, you shouldn't work, you shouldn't do anything but concentrate on skiing, and I think I enjoyed it for a little while and then you start getting bored.” Some athletes, like Tammy, realized the negative aspect of this sort of dedication: “Say something bad happens when you're skiing, or you get injured or something, then you don't really have something else to focus on and that's more difficult I'd say.” Brad experienced the downside of skiing being his sole focus: “The racing season when nothing was going my way it was hard for me because I didn't really have anything else in my life other than skiing. It was hard for me to find any happiness in anything.” Tammy explained, “Now that I look back on it, [the national training program]—it's great—but it doesn't give you a good balance I guess you could say.”

Besides not being able to designate time for hobbies, athletes expressed that they often neglected relationships with non-skiers, such as friends, family, and romantic relationships. This was due to the new time commitments of the team and focus of the athletes: “I do feel that some of those relationships were definitely—not lost—but weren't taken care of as much because I was so focused on skiing, so definitely a negative side effect of that” (Zak). Some athletes felt that it was difficult to maintain relationships during the junior to senior transition when they were often travelling and training. Tammy explained: “You're always gone. I would be at home for two weeks and then I would leave for a month and then I would come back for two weeks

and then I was gone for a month and a half, so that is kind of hard. I kept in touch with some of my friends from school, but there was a definite—I won't say void—but you're just not as close as what you were". She thought that it was easier to associate with skiers because as an athlete she was able to identify with them: "Part of it is, I think, when you're skiing so much a lot of your friend base comes out of skiing when you spend that much time doing it, and especially they were the people who are going to get what you're doing the most." Regardless of the specific reason, all of the athletes reported spending less time with people outside of skiing during their first year at the national training program than they did prior to joining the program.

Expectations as national training program skiers. The athletes perceived that there were expectations of them as national training program skiers regarding appearance, performance, and financial commitments. Although they enjoyed the professionalism of their new team, the perceived expectations that came with this were often stressful.

Most of the athletes used the word "professional" when describing their thoughts of joining the national training program. Zak stated that he and his teammates felt an obligation to behave differently than with their previous teams: "We knew that we weren't the national team, but we wanted to get there and we knew that to get there we needed to act like we belonged there." This included the fact that they now were not only required to attend training and practices, but administrative meetings and events as well. Ryan explained: "There's a lot more professionalism to it, you don't just show up to training and train and do your own thing, it's all planned." Jeff felt that there was a sense of status that came with joining the national training program: "It was a bit of machismo. Being on [the national training program] was a pretty sexy thing. It was pretty cool. We were all wearing the same gear, we weren't a club, it was sort of the next best thing. Everybody looked up to us."

However, this professional aspect meant new performance pressures. The athletes described being required to adjust to pressures that were directly associated with the fact that they were now members of the national training program. Ryan explained the reason for this pressure as, “You’re on the national [training program] and there’s not many people that achieve that level, so especially first year, you feel a lot more pressure to make it there and to perform.” Athletes stated that performance is a criterion for continuing to be a member of the national training program. Furthermore, athletes expressed feeling pressure to perform during the transition to the national training program to please administrative members, sponsors, and themselves. Tammy said, “If you don’t do well then it reflects poorly on yourself or the coach, and you have to do well in order to make it onto the next year, and then you also have sponsors and so when you write back to them you want to be like, ‘yeah it was so awesome, I did so great’ not like, ‘yeah well this race was not grand, but thank you for your money.’”

Athletes cited money as a significant challenge while they were members of the national training program. The expectation that a national training program athlete be committed to their sport requires them to not only invest time and energy, but to pay to do so. As Brad explained: “Especially when you’re on a training centre . . . you’re expected to do all the training camps and attend all the races and everything, so it’s not cheap”. Although funding and sponsorships might ease the financial burden, they brought their own stresses for the athletes. For Ryan, it was the need to ask others to financially support him: “After my first year I decided to not pursue sponsorships anymore. It just wasn’t fun hassling people for money. It makes you feel a bit bad.” As national training program athletes, many skiers rely on performance to acquire funding for their sport. This process is known as “carding,” which requires that athletes meet specific performance criteria to obtain funding. Brad described the pressures of knowing there was more

to each performance than medals and bragging rights: “Money was a really big issue for me so it was really important for me that I got carding so that I could continue racing, so that was a big one.” These heightened financial stresses affected the athletes’ performance, especially being new to the team and not realizing the extent of the financial commitment. Zak felt this pressure, saying, “That was a negative stress for sure. I did think I was coming into a situation that was a little bit more supported financially, and so once getting into it, I realized that it was kind of a bigger fish that I took on, and now looking back on it, it was definitely a financial stressor and I think I could’ve raced better if that financial stress wasn’t there, but that’s the cost of doing business.”

Overthinking and overdoing. With an increased commitment level, a new environment, and numerous new pressures, athletes stated that during the transition to the national training program they tended to overthink their involvement with the team. This affected their day-to-day training, as they attempted to ‘micromanage’ every aspect of their lives with respect to skiing. Things such as technique, physical fitness, mental fitness, nutrition, and energy investment were now being analyzed and overanalyzed by athletes like Jeff: “I was absolutely spending more energy than required analyzing everything and trying to sort everything out, and I was wasting energy doing that.” Jeff thought he was attempting to dedicate too much energy to his pursuits: “In the spring when I should’ve been just taking things easy and adjusting to a new town and settling not being at my parents’ place and just letting myself absorb the change, I was nipping at the bud. I was trying to get a job. I was trying to fill all the space that I thought I had where I should’ve just really kept myself at a recovery mode, and then when I got to the bulk bulk bulk summer training, I was always two steps behind, I never could catch up.” Other athletes tended to overthink when it came to races and competition, which affected their overall performance.

For example, Brad said, “At a time trial or just a running race in the summer, it didn’t matter what happens, so I’d just go and I’d do what I do and have fun doing it so I’d have a good result, and then race day would come and I was just really over-focused or over-stimulated for the race.” Some athletes reasoned that their tendency to overthink things was a result of wanting to control all aspects of their training and performance. Others stated that it was related to the pressures they were feeling to perform as senior athletes. Once again, Brad explained, “Just before every race I guess I must’ve just been thinking about those things and if you don’t start racing fast you’re not going to be able to achieve those goals and you’re not going to be able to keep doing what you’re doing so I guess that was kind of the mindset that was holding me back.” In contrast, Ryan felt he pushed himself during his transition to the national training program because he had learned a specific mindset and attitude toward training: “I was very set. I had a hard time taking time off and my mind is always ‘go.’ If I do more I’ll be faster.”

Team dynamics. The dynamics of the athletes’ team relationships tended to differ as compared to their junior teams. The athletes were required to adjust to new coaches and new teammates during their transition to senior sport.

Coach-athlete relationship. Athletes’ description of their relationships with their new senior coaches ranged from beneficial to detrimental. Some of the athletes appreciated the fact that their workouts and training were being designed by a full-time, dedicated coach who they felt was experienced and knowledgeable about that level of performance. Most of the athletes’ former coaches were volunteers and/or coached part-time. Steve described, “Having a full time coach, the development style was more personal, so you develop a relationship, and he was a good role model for that. Previous to that I had never had a coach that was that close and easy to talk to before.” Brad enjoyed that he was able to voice his opinions when it came to training:

I had already had two years of training centre experience, so he wanted to know what I had done and what I liked and what I didn't like and what worked for me and what didn't work for me. We had a lot of meetings like that early on just to figure out what direction we wanted to go, how much volume I wanted to do for the year . . . we just continued that throughout the year to make any definite changes to the training plan as necessary depending how I was feeling.

Some of the athletes, like Ryan, commented on the personal style of coaching and how that appealed to them: "I found him as a friend. He was my coach, we had a professional relationship, but we also had a friendship outside of that, and he developed that with any of his athletes." However, other athletes like Jeff, whose previous coaches were volunteers, felt that because the coaching job was a paid position, they expected more of the coach: "I saw it as I had a paid coach, I had certain expectations, and I definitely had my frustrations with him, absolutely had my frustrations with him, and they came out every day all the time." Jeff became frustrated with the coach when he did not think that the coach was meeting his high standards for performance. Other athletes described a lack of autonomy, and this being a source of stress while transitioning to the national training program. For example, Tammy thought her former coach knew her skills and tendencies well and catered to them, whereas her new coach did not: "They say that they accommodate for each individual's needs and wants or whatever but every time I asked to do something that I thought was better suited or if I was feeling too tired, I didn't feel that this particular training was working for me, they'd say 'oh no plough through it, plough through it'." The number of athletes who were members of the team at a time affected how the athletes perceived the coach's involvement with their skiing. Ryan expressed that he felt he needed coach involvement to perform well, and that with more people on the national training program team as compared to his former team, this need was not met: "I thought my coach was not involved sufficiently, and I can't put all the blame on him, but it's definitely quite a bit."

Athlete-athlete relationship. The team atmosphere itself was one of intimacy and

closeness. Athletes spent a lot of time together training, travelling, and sometimes even living together. For some athletes, the close-knit nature of the team was beneficial to their transition to senior sport, especially when they were able to identify with their teammates. Steve mentioned, “It’s pretty easy. Everyone’s like-minded and has similar goals and whatnot so it’s not difficult. It’s kind of like a big family.” At times, teammates served as models for balancing work and fun, which was sometimes difficult for new athletes. As Brad explained: “Coming here and meeting up with some athletes who were also still serious about training and skiing but were still pretty good at having fun too, so it was just good to be in that atmosphere.”

However, at times the lack of privacy and space was a challenge, especially when teammates were not friends with each other. Some of these interpersonal issues were due to athletes perceiving that their teammates were not of the same maturity level as they were, even if the athletes were of similar age. Brad thought his new teammates’ behaviours were immature and unprofessional, when compared to his former teammates: “I had a lot of issues with the younger athletes and if they were doing something that really bothered me, even if I told them it was bothering me, they would just be like ‘oh sorry,’ and then continue doing it.” This perception led to emotional issues for Brad: “It got to the point where every time I saw some of them I’d just get angry, and I lived with them. It got to the point where I’d go to bed angry and I’d wake up angry, so it’s pretty hard to do anything well when you’re angry.” This eventually led him to quit the team: “I said enough is enough and I moved home. It was a long time coming, but that was pretty much the reason why. I just had to get away.”

Another issue was a sense of “cliques” of teammates, and what was deemed to be socially acceptable. Especially being new to the team, athletes desired a sense of belonging. Ryan explained, “There were a few people on the team that didn’t really get along, and if you didn’t do

something that they thought was—not relevant to skiing—but if you didn't do something that they thought was cool, you'd be shunned.” Sometimes, however, the interpersonal issues with teammates were not due to the behaviour of the teammates, but of the athletes themselves. Jeff said, “I definitely was out to prove myself at any cost, so if I saw somebody as sort of being in the way or being counterproductive, oh man, I was not the nicest. Even to the point of a roommate—we were sharing a room—and they were reading and I wanted to be sleeping, there would be a problem. Every little relationship was just under stress.” Jeff felt that his drive to succeed as a new member of the national training program required that he now discount personal relationships: “I think I was kind of all over people, just running right over them, steamrolling them, because I was just on a path and that's where I was going, and don't stand in my way or I'll friggin' step on your face.”

Competition. All athletes referenced the competitive nature of the national training program among its members and thought of themselves as competitive people. As Zak explained: “As an athlete I held myself to the highest standard I could, and if that wasn't my standard and it was somebody else's, I compared myself against them to get better. I think for me that helped me get better.” Steve shared this competitive drive: “It's hard. I'm a competitive personality, and it's hard to not compete at everything I do and want to be the best at everything.” Some athletes viewed competition during their transition to the national training program as a requirement: “We were put in an environment where cross-country skiing is an individual sport and you want to be the best on that field, and so you're constantly comparing yourself to other athletes. It's the nature of the beast, really, if you're not driven by competition, then you're not going anywhere” (Zak). Some of the athletes stated that they did not compete with their junior teammates, as they were the teams' top athletes. However, at the national

training program, the athletes felt that comparing themselves was easy with a sport like cross-country skiing, especially with teammates. Jeff commented: “It’s pretty easy to compare yourself in a race when you’re all racing the same race. First guy across the line right did the best, and when you literally do the same training day in and day out, and you know where you are relatively in terms of fitness to each other, obviously you are comparing yourself.” This mindset was not reserved exclusively for races, but rather was a daily occurrence at the national training program. Jeff described the team environment: “It was a competition every day. It was a competition every single day, on everything, for everything.” This motivated some athletes to match their peers, regardless of whether or not they felt it was beneficial or detrimental to their workouts, Ryan said: “It was always a competition. We always competed, and no one ever really said anything about it, but I always felt in the back of my mind, ‘crap, this guy did twelve, I only did eleven laps’ or ‘he did four hours, I only did three and a half.’ In my mind I was in a competition, that’s what my mindset was. It was a competition. If I don’t do as much as these guys, I’m not getting the same benefit.” Even trivial things became grounds for competition. As Ryan explained: “It was a competition to see who could get out on their roller skis first, who could put their boots on the fastest. Everything was a competition.”

Poor performance and related emotions. While most of the athletes stated that their training during their first years at the national training program was beneficial and their fitness was the best of their careers so far, this did not seem to translate to satisfactory performance. Although they were previously the top juniors of their respective teams, most of the athletes reported disappointing debut seasons at the national training program. Jeff, who expected a break-out season, was not happy with his performance when it came to races: “My results were equal to or lesser what my results three years prior were, so I just sent myself back to the stone

age in terms of my race performance.” Although he fared well during pre-season training, he was not able to perform to his expectations when race season started, saying: “I was just always stuck at training pace. I just was so, so flat.” Brad attributed his performance to transitioning from junior to senior sport, saying: “My first year wasn’t a great year, but it was my first year as a senior man, so just that in itself is a big step. Going from junior to senior is a pretty harsh reality, being one of the top juniors in the country, and then finding yourself significantly further down the list the next year.” Brad, like Jeff, performed well during training, however did not meet his expectations for races: “That was just kind of a bummer. I knew I had it in me but I could never make it happen on race day.” As a junior, Tammy was a top athlete. During her first year with the national training program, however, her performance was not up to par. She explained: “my distance was kind of getting worse and worse, so I would say I was average for that, but the year before that I was one of the top.” Steve attributed his performances to his lack of training as compared to peers: “The year before that I won some medals at nationals and was close with guys that the first year at the training centre they were still beating me because they had gotten a year of training more than I did.”

Athletes described feelings of frustration when their performance was not up to par during their transitions to senior sport. Brad felt frustrated that he was competing with more experienced athletes and not placing as he was the previous season: “It was pretty frustrating. I knew it was kind of expected anyway, because it’s not like I was expecting to be beating the top older guys in the country, but it was definitely frustrating.” Brad felt he was performing well during the pre-season but not during race season: “I had phenomenal training years and I was in the best shape of my life at the start of the season, so I think probably that’s where most of that frustration came from because I knew I was underperforming.” For some athletes, this frustration

was paired with depression. As Ryan explained, “I don’t know how depression feels but I would say for sure for a little while I was depressed because it sucked.” Jeff felt depressed at the end of the season: “It was just like depression too. I was depressed because I knew I was at the end of it. I knew I wasn’t coming back on the team, I knew I’d blown my opportunity, I was trying to tell myself that I would give it another year on my own, but knowing in my heart that I just didn’t have it.”

Negative effects of training. During the junior to senior sport transition, athletes experienced negative effects of their training schedules and commitments, such as injury, burnout, and overtraining.

Injury. Of the six athletes who were interviewed, three reported injuries while members of the national training program, two of which occurred during their first season with the team. This meant adjustments to training and racing, as well as rehabilitation commitments. One of these athletes was Jeff, who explained, “When I got an injury and I was trying to juggle at one point nine sports medicine appointments a week, full time class, full time training.” Tammy’s injury required time off of skiing, however she thought this was perhaps a good thing: “My first year I actually broke my wrist while I was skiing so I had to take a month out of doing a lot of things, but I think that actually saved me to the end of the season because it gave me that rest, and I think if it didn’t give me that rest then I wouldn’t have finished.”

Burnout and overtraining. Besides injury, three of the athletes reported overtraining and burnout during their first two seasons at the national training program. Jeff attributed his burnout to not knowing the energy commitment required of him as a new national training program member: “Without having a big picture, never really knowing what was around the corner and trying to adjust, where I should’ve taken advantage and adjust to a new situation, I wasn’t

respectful of that and I just burnt out I just flat out burnt out.” Tammy realized that she was not enjoying the things about skiing that she once loved: “I wasn’t having fun doing distance, which I used to love doing, like five, ten k’s whatever, you know ‘ten k’s, they’re so fun,’ and then I went and I started racing and I had my first thought of ‘this isn’t very fun.’” Similarly, Ryan experienced a lack of enjoyment of the sport and the physical ramifications of overtraining: “The next weekend there was another race out west. I woke up and I’m like, ‘I’m not going, I’m not racing, it’s not even worth it.’ It’s not fun to race when you feel like that.” Due to this overtraining, Ryan stopped skiing. It was not simply the fact that he was not skiing that was difficult for him: “It would’ve been different if I had made the decision myself and said ‘OK I want to take this year off of skiing,’ because you can still do stuff, you can still go for a ski, but when you’re overtrained you’re pretty restricted. You can’t do any physical activity, like I was dead. Walking up stairs was like was a workout.”

Hindsight. Without being a specific interview question, all athletes described things that they would do differently if they were able to reprise their rookie national training program experience. Some of these things related to allowing themselves to adjust to a new situation. Jeff said: “If I would’ve given myself some breathing room, I could’ve adjusted to the changes, and I probably would’ve done very well, but I just wrapped myself like a python. I gave myself no extra flexibility at all, so hard that to adjust to everyday life, I didn’t really.” Other athletes, like Tammy, felt that they would maintain more of a voice when it came to their individual training and what they felt they should be doing for it: “If I would’ve went back to do it again I would’ve just done it, rather than seek their approval and keep everyone happy kind of a thing.” Ryan felt that he would be able to avoid burnout if his perspective was different at the time: “When I look back on it, if I would’ve just adjusted two weeks of that year then nothing would’ve happened,

but I didn't really do anything about it so I kind of screwed myself.”

Discussion

The original purpose of this study was to investigate how healthy perfectionistic and unhealthy perfectionistic athletes perceived the transition from junior to senior sport. To address this purpose, the study utilized a two-step sequential mixed methods design. The first step focused on the identification of athletes who qualified as perfectionists. In this step, 27 current and former members of a high performance national cross-country skiing training program completed a perfectionism self-report questionnaire. Responses to this questionnaire were then transformed into scores that represented each athlete's levels of perfectionistic strivings and perfectionistic concerns. Individual athletes were subsequently identified as perfectionists based on (a) quantitative comparison of their scores to percentiles derived from the entire sample's scores and from scores reported in published literature and (b) ratings of their perfectionism levels as provided by their coaches. This procedure identified two unhealthy perfectionists and one healthy perfectionist. This low number of interviews was deemed unsuitable to provide a rich description of participants' perspectives, and would not allow for an appropriate evaluation of the study's original purpose. However, seven athletes met the criteria for high perfectionistic strivings. A large body of literature has focused on the variable of perfectionistic strivings and quantitatively examined its relationships with other variables within sport (for a review, see Gotwals et al., 2012). However, no research has focused on individuals characterized by high levels of perfectionistic strivings and qualitatively explored their perceptions and experiences. In response to this literature gap, the present study's purpose was reoriented to explore how athletes with high levels of perfectionistic strivings perceive and experience the transition from junior sport to senior sport. This exploration served as the focus for the study's second step.

In Step 2, semi-structured interviews were conducted with the six athletes identified as having high perfectionistic strivings. Using inductive thematic analysis, eight themes were identified: *Balancing Priorities, Expectations as National Training Program Skiers, Overthinking and Overdoing, Team Dynamics, Competition, Poor Performance and Related Emotions, Negative Effects of Training, and Hindsight*. In the remainder of the discussion section these themes are reviewed within the context of the stress process, the athletic career transition literature, and the perfectionism literature. The section concludes with limitations and implications of the present study.

Themes and the Stress Process

The present study's themes reveal demands that the athletes perceived in their transition from junior to senior sport, provide insight into how they appraised those demands, and identify the emotional and behavioural consequences associated with those perceptions and appraisals. As such, the themes fit well within Lazarus and Folkman's (1984) conceptualization of stress as a multi-stage process. In the following paragraphs, the stress process is described. Subsequently, themes of the present study are discussed with regard to how they relate to the stress process.

In the first stage of the stress process, an encounter with the environment that requires a subsequent response—a demand—is presented. A Primary Appraisal occurs, where the individual asks themselves, "Am I in trouble or being benefited, now or in the future, and in what way?" (Lazarus & Folkman, 1984, p. 31). When the individual perceives that the demand is either a harm/loss, a threat, or a challenge, the demand is appraised as being stressful. A harm/loss is a demand where there is damage already sustained. A threat is a demand where there is an anticipated harm/loss, therefore there is potential for coping to be employed. A threat results in emotions such as fear, anger, and anxiety. A challenge is a demand where there is

potential for gain or mastery. A challenge results in emotions such as eagerness, exhilaration, and excitement.

When a demand is appraised as stressful by the Primary Appraisal, the next stage is a Secondary Appraisal, where the individual asks themselves, “What if anything can be done about it?” (Lazarus & Folkman, 1984, p. 31). This refers to what coping options might be available and whether they will accomplish what they are supposed to, whether these coping strategies will be used effectively, and what the consequences are of using a coping strategy (Lazarus & Folkman, 1984).

The aforementioned characteristics of the stress process are reflected in aspects of the themes identified in the present study. Several themes revealed demands that the skiers were faced with as they transitioned to the national training program. Aspects of these same themes reflected appraisals, such as whether a demand was characterized as a harm/loss, a threat, or a challenge. Athletes described subsequent emotions of these appraisals, such as anger and anxiety. For example, the *Balancing Priorities* theme captured the demand of being required to designate time for different commitments, such as athletics, academics, hobbies, and relationships. Perceiving that they were or were not able to balance these commitments would be considered a primary appraisal. Athletes who appraised this demand as a challenge thought that school was beneficial to their skiing, whereas athletes who viewed this demand as a threat were unable to dedicate time to each of their different priorities.

The *Competition* theme reflected the demand of the athletes’ training environment, and the daily competition with teammates. Perceiving this environment as detrimental or beneficial would be considered a primary appraisal. Athletes who appraised this demand as a challenge described the competition as improving their performance, whereas athletes who viewed this

demand as a threat experienced a sense of unnecessary competition.

The *Team Dynamics* theme represented the demand of relationship issues with significant others. Perceiving that one was able to adjust to new teammates and coaches would be considered a primary appraisal. Athletes who appraised this demand as a challenge described beneficial relationships with coaches and teammates, whereas athletes who appraised this demand as a threat expressed conflict and relationship issues.

The skiers interviewed for the present study did not mention much about coping. This fact has applied and research implications. For example, perhaps it might be beneficial to build the skiers' repertoire of coping strategies. Furthermore, future research might want to investigate the effectiveness of different coping strategies for similar athletes during the junior to senior sport transition.

Overall, the themes as described by the athletes, and their relationship with the stress process, are evidence that the transition to senior sport was a stressful experience, and that although the demands were similar for each athlete, these demands were sometimes appraised differently. This might be due to differing personality characteristics of the athletes related to appraisals, however this would warrant further research.

Contextualization within the Athletic Career Literature

There are several similarities between the participants' descriptions of their transition to the national training program and the literature's characterization of athletes' transition from junior to senior sport. The *Balancing Priorities* theme captured how some of the skiers struggled to balance priorities such as school and sport as their transition to the national training program also coincided with a transition to university. The *Team Dynamics* theme reflected athletes' conflict with their coaches regarding training, involvement, and expectation, as well as issues

with their teammates regarding their personal drive, maturity, and exertion of peer pressure. The *Poor Performance and Related Emotions* theme summarized some athletes' disappointment with their debut seasons at the national training program. These findings fit well with published accounts that, during the junior to senior sport transition, athletes often experience relationship issues with coaches and teammates (Stambulova, 1994), they are required to balance sporting goals with life goals (MacNamara & Collins, 2010; Stambulova, 1994), and they are required to compete with older, more experienced peers and their performances do not tend to meet their personal standards (McNamara & Collins, 2010; Wylleman & Reints, 2010). Such similarities provide support for the current transition literature and show that those contentions extend to a new sport context, namely high performance cross country skiing.

The present study also yielded some results that contrast with the sport transition literature. For example, the *Balancing Priorities* theme described athletes not being able to balance training with rest, and the stress of balancing university with sport. The *Team Dynamics* theme represented detrimental relationships with teammates that the skiers were housed with, and the fact that—while they did describe relationship issues with coaches and teammates—they did not describe similar issues with parents. In contrast, findings from the sport transition literature highlight that during the transition from junior to senior sport, athletes are able to allot appropriate time for training and rest; the flexibility of university facilitates athletes' commitment to sport; being housed with fellow athletes is socially beneficial; and athletes experience relationship issues with parents (MacNamara & Collins, 2010; Stambulova, 1994).

Differences between the present findings and those documented in the athletic transitions literature could be due to several factors. For example, the unique contexts of cross-country skiing or the national training program might influence the skiers' experiences. However, it is

possible that these differences were due to the interviewed skiers' high levels of perfectionistic strivings. The skiers demonstrated typical perfectionist behaviours during the transition to senior sport, such as not dedicating appropriate time for rest and experiencing time management issues (Burns, 1980; Hamachek, 1978; Missildine, 1963). However, validating claims like this is difficult because the present study did not sample a comparison group of athletes with low perfectionistic strivings, and no study has examined how perfectionism influences athletes' transitions between stages of their athletic career. However, there is research on how perfectionistic students navigate their transition to a school for the academically gifted. Documenting similarities and differences between the present findings and that body of literature could help illuminate the potential impact of perfectionism in athletic transitions. This topic is addressed in the next section.

Contextualization within the Perfectionism Literature

Perfectionism and Transitions. Although there are no studies that investigate the role of perfectionism in the junior to senior sport transition, Speirs Neumeister et al. (2007) did explore perfectionistic high school students' perceptions of their transition to a school for the academically gifted. Given that the transition to senior sport is similar in several respects to the transition to an academically gifted school (as described in the introduction), perhaps it's not surprising that some themes from the present study are similar to those identified in Speirs Neumeister et al.'s (2007) study. Of particular interest are findings that Speirs Neumeister et al. specifically associated with students with high levels of self-oriented perfectionism (a central facet of perfectionistic strivings; Stoeber, 2011). For example, the perfectionistic striving skiers in the present study described not meeting their own personal performance standards and indicated the negative emotions they experienced as a result. Additionally, the skiers shared that

they became less influenced by their parents, and more influenced by their coaches and teammates, as they transitioned to the national training program. Similarly, the self-oriented perfectionistic students in Speirs-Neumeister et al.'s study did not perceive that they were meeting their personal performance standards, either, and were not performing as well as they did at their previous schools. They subsequently experienced negative emotions such as guilt and anger. Additionally, the students were less influenced by their parents, and more influenced by their classmates, during their transition to the academically gifted school. Documenting these similarities highlights common experiences that individuals with high levels of perfectionistic strivings may encounter as they transition to a higher level in sport or school. Future research is required to support this claim, as well as to examine if these common characteristics also transfer to other achievement contexts

However, there were notable differences between the results of Speirs Neumeister et al.'s (2007) study and the results of the present study. For example, the skiers in this study did not describe their perfectionism changing during their transition. They did describe demands such as balancing priorities, competition with peers, and relationship issues with coaches and teammates. Despite these demands, the skiers maintained a sense of commitment to their sport. In contrast, the students in Speirs Neumeister et al.'s study shared that their perfectionism first increased and then decreased during their transition to the academically gifted school. The students did not express the demands of balancing different priorities, competing with peers, or relationship issues with teachers and classmates. They did, however, describe an "all-or-none" thinking attitude, where if they were not able to perform perfectly, they did not commit to performing at all.

Contrasting findings between the present study and Speirs-Neumeister et al.'s (2007)

study might be due to the fact that the two studies used slightly different methodologies and focused on different domains. For example, while Speirs Neumeister et al.'s interview guide focused on perfectionism, the present study's interview guide focused on the characteristics of the junior to senior sport transition. Speirs Neumeister et al. asked specific questions regarding the students' perfectionism, such as "How do you think your perfectionist tendencies evolved?" and thus were able to report things like decreasing perfectionism. The present study, however, did not use the word "perfectionism" when interviewing athletes because of evidence that some perfectionists do not like to be referred to as "perfectionists," and think it is offensive to be labelled as such (Rice et al., 2003). With regard to context, while the transition to senior sport and the transition to an academically gifted school are similar, they are not the same. While students may be able to adopt "all-or-none" thinking for their academic endeavours, this is not necessarily an option for skiers in the national training program. Their membership with the national training program is dependent on their performance, and they are required to be committed to that performance, regardless of whether they are able to achieve perfection or not. To foster the development of intervention strategies that help perfectionistic athletes and students transition to more challenging contexts, it is important for future research to further explore these differences in findings, methodology, and focus. Doing so may help distinguish between aspects of intervention strategies that are useful across sport and academic contexts and aspects that require adaptation to be relevant within either context.

Perfectionism and Burnout. Although it was not a specific interview topic, burnout also emerged as a potential consequence of the transition to the national training program. Athlete burnout can be defined as psychological, physical, and/or emotional withdrawal from a sport which was previously enjoyed (Smith, 1986). Three definitive burnout symptoms are emotional

and physical exhaustion, a decreased sense of accomplishment, and the devaluation of sport (Raedeke, 1997; Raedeke & Smith, 2001).

With regard to the present study, three athletes—Jeff, Tammy, and Ryan—specifically mentioned that they experienced burnout during their transition to the national training program (see the *Negative Effects of Training* theme). Furthermore, the theme *Poor Performance and Related Emotions* reflected the symptoms of burnout such as emotional fatigue and a perceived lack of achievement. The main contributors to these themes were the same athletes who mentioned burnout. For example, Jeff described not adjusting to the energy commitment of the national training program and consequently experiencing physical exhaustion. Tammy described her lack of enjoyment for skiing, which she had previously loved. Ryan described not wanting to perform due to his physical and emotional exhaustion.

It is interesting to note that Jeff, Tammy, and Ryan—the three athletes who shared that they suffered from burnout and symptoms associated with burnout—were the only athletes who had high levels across both perfectionistic strivings and perfectionistic concerns. None of the other athletes, who each had high perfectionistic strivings but not high perfectionistic concerns, mentioned burnout during their interviews. Similarly, Gotwals (2011) found that athletes with high perfectionistic strivings and high perfectionistic concerns reported greater burnout symptomatology than athletes who combined high perfectionistic strivings with low perfectionistic concerns. Collectively, these findings might be evidence that high perfectionistic strivings alone do not make athletes at risk for burnout during a transition. Instead, it appears that athletes become more vulnerable to burnout when they combine high perfectionistic strivings with high perfectionistic concerns (Gotwals, 2011; Stoeber, 2011; Stoeber & Otto, 2006). This highlights the importance of considering perfectionistic strivings and perfectionistic concerns

simultaneously when investigating burnout and other outcomes associated with perfectionism and athletic transitions.

Relation to other possible constructs. There are themes and/or aspects of themes that might be related to the athletes' high perfectionistic strivings, however would warrant further study to validate such claims. For example, the *Overthinking and Overdoing* theme described the athletes' tendency to become highly occupied with things that were related to skiing. Such findings are in line with past research that has documented significant relationships between perfectionistic strivings and obsessive-compulsive tendencies and rigidity (Hill et al., 2004; Martin & Ashby, 2004; Rheume, et al., 2000). Perhaps the skiers' levels of perfectionism, in combination with their obsessive-compulsive tendencies contributed to their attempts to micromanage each aspect of their lives. The *Competition* theme described the athletes' desire to compete with fellow teammates across multiple contexts, even when the goal was not to be fastest or first. Past research has established relationships between perfectionistic strivings and ego achievement goal orientations, where success is defined through favourable social-comparison (e.g., Appleton, Hall, & Hill, 2009; Dunn, Causgrove Dunn, & Syrotuik, 2002; Hall, Kerr, & Matthews, 1998). Perhaps the athletes' levels of perfectionism, in combination with their tendencies to endorse ego-oriented goals created a desire to compete with fellow athletes, despite the importance of the task. The contentions made here highlight that valuable insight can be gained by examining how perfectionism interacts with other individual difference variables to explain individuals' cognition, affect, and behaviour.

Limitations

This study is not without limitations. First, this study did not interview non-perfectionistic athletes or athletes with low perfectionistic strivings, and was unable to compare

the experiences of such athletes with those who were interviewed. As a result, it is unclear whether the perceptions and experiences of the skiers were specifically due to their high levels of perfectionistic strivings. Future research is needed to investigate whether or not athletes with high perfectionistic strivings experience the junior to senior transition differently than athletes with moderate or low perfectionistic strivings.

Second, the Sport-MPS-2 questionnaire that was used to measure athletes' perfectionism were completed electronically, and while this was convenient, it did not allow the researcher to meet with the athletes, establish rapport, or answer any possible questions. The electronic questionnaires did, however, allow an efficient way for athletes residing in different provinces and countries to participate in the study. Additionally, some evidence suggests that there are no significant differences between electronic questionnaires and paper and pencil questionnaires (Lonsdale, Hodge, & Rose, 2006). Future research may want to explore whether or not this is the case with questionnaires such as the Sport-MPS-2.

Third, the athletes were interviewed retrospectively about their experiences with the junior to senior sport transition. As a result, it is unclear whether the present findings reflect the perceptions and experiences of athletes actually in the midst of this transition. It should be noted, though, that some of the skiers specifically mentioned that they were able to recall their transition to the national training program with relative ease. Indeed, Zak mentioned that looking back on his transition retrospectively actually enhanced the clarity of his perceptions: "I definitely think that perspective now being out of it you can see the good and the bad quite clearly, in the moment of that first year it was definitely more of a grey zone." Regardless, interviews with athletes currently experiencing this transition would make a valuable contribution to the literature.

Fourth, and perhaps most significant, the study was not able to address its original purpose: to investigate the perceptions of healthy and unhealthy perfectionistic athletes with regard to the junior to senior sport transition. As stated earlier, this was because the low number of participants did not yield enough healthy perfectionists and unhealthy perfectionists to suitably represent each orientation. Interestingly, other qualitative perfectionism studies which used similar methods to this study (e.g., Rice et al., 2003; Schuler, 2000) also identified a low number of qualified interviewees as compared to their original pool of participants. For example, Gotwals and Spencer Cavaliere (in press) only identified four healthy perfectionists out of a sample of 117 intercollegiate athletes. In the present study, it was expected that perfectionists would be common among the national training program's skiers: applied sport psychologists have speculated that perfectionism is very prevalent within high performance sport (Gould, Dieffenbach, & Moffet, 2002; Hardy et al., 1996; Zinsser, Bunker, & Williams, 2006) and the national training program's skiers are semi-professional athletes who compete at the national and international level. Either this was not the case or the identification protocol used in the present study was not precise enough to accurately detect perfectionistic skiers. Regardless, this study was unable to directly contribute to the debate of whether or not perfectionism might be considered a healthy personality characteristic. Future studies might want to explore the effectiveness of different innovative methods to identify perfectionists in high performance sport.

Implications and Conclusion

In conclusion, the present findings suggest that transitioning from junior to senior sport is a stressful experience for athletes with high perfectionistic strivings, although the experience of stress may be different. Recognizing the applicability of the stress process to athletic transitions (Lazarus & Folkman, 1984) could ease this burden. The demands inherent to the junior to senior

sport transition could be anticipated and countered by teaching skills, having resources available, and adjusting the context. For example, demands associated with balancing priorities could be countered by teaching time management skills and encouraging athletes to pursue hobbies and non-athlete relationships (thus, fostering a multifaceted self-concept and a varied social network). The athletes described demands such as poor performance, injury, overtraining, and burnout. Sport psychology consultation should be available as required to manage these demands, and athletes should set realistic and attainable goals for their sport. Although a competitive environment might encourage higher performance, this competition should be reserved for appropriate events to avoid it being a stressful primary focus. By acknowledging and taking active steps to counter these demands, athletes with high levels of perfectionistic strivings should be able to avoid some of the stressors of the junior to senior transition, and navigate this transition more successfully.

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Demographic Information									Sport-MPS-2 subscale scores		Coach Ratings	
Pseudonym	Gender	Age - yrs.	Yrs. Skiing Experience	Interview Format	PS	COM	P-S	PC				
Jeff	Male	26	26	Skype	4.43	3.38	4	4				
Steve	Male	24	11	In-Person	4.57	2.75	5	4				
Tammy	Female	24	8	Skype	4.14	4.13	3	4				
Brad	Male	21	12	Telephone	4.29	2.25	4.5	3.5				
Zak	Male	28	10	Telephone	4.71	3	3	4				
Ryan	Male	21	19	In-Person	4.14	3.75	4	3				
Selection Criterion Scores												
					PS 33rd	PS - 66th	COM - 33rd	COM - 66th				
Inter-Sample Comparison Score					3.38	4.08	2.55	3.29				
Intra-Sample Comparison Score					3.43	3.99	2.37	3.09				
<p><i>Note.</i> PS = Personal Standards, COM = Concern Over Mistakes, P-S = Perfectionistic Strivings, PC = Perfectionistic Concerns.</p>												

Appendix A

Demographic Questionnaire

Age _____

Gender (*Please circle one*) **M** or **F**

Years of Cross-Country Skiing Experience _____

When did you join the NDC training program (month and year)? _____

Did you have to move to Thunder Bay to join the NDC? (*Please circle one*)**Y** or **N**

If yes, where did you move from? _____

Are you a current or former member of the NDC training program? (*Please circle one*)**Current** or **Former**

If former, what year(s) were you a member of the NDC training program?

- ★ *Be assured that the individual information you provide here **will be kept private**. Other than the research team, no coaches, teammates, or any other individual or organization will ever see your contact information or any of your responses to the questionnaires.*

Appendix B

Competitive Orientations Scale

INSTRUCTIONS The purpose of this questionnaire is to identify how you viewed certain aspects of your experiences in competitive cross-country ski racing over your first 1-2 seasons as a member of NDC. Please think back to that time period and respond to the following items based on how you thought, felt, and behaved back then. (Circle/highlight one response option to the right of each statement). **There are no right or wrong answers** so please don't spend too much time on any one statement; simply choose the answer that best describes how you would have viewed each statement when you first started NDC.

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

Please complete the remaining items in this questionnaire on the next page. ☞

In your first 1-2 seasons with NDC, to what extent did you agree or disagree with the following statements?		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
17.	It is important to me that I be thoroughly competent in everything I do in skiing.	1	2	3	4	5
18.	I follow pre-planned steps to prepare myself for competition.	1	2	3	4	5
19.	I feel like I am criticized by my parents for doing things less than perfectly in competition.	1	2	3	4	5
20.	Prior to competition, I rarely feel satisfied with my training.	1	2	3	4	5
21.	I think I expect higher performance and greater results in my daily skiing training than most skiers.	1	2	3	4	5
22.	I feel like I can never quite live up to my coach's standards.	1	2	3	4	5
23.	I feel that other skiers generally accept lower standards for themselves in skiing than I do.	1	2	3	4	5
24.	I should be upset if I make a mistake in competition.	1	2	3	4	5
25.	In competition, I never feel like I can quite live up to my parents' standards.	1	2	3	4	5
26.	My coach sets very high standards for me in competition.	1	2	3	4	5
27.	I follow a routine to get myself into a good mindset going into competition.	1	2	3	4	5
28.	If a teammate or opponent skis better than me during competition, then I feel like I failed to some degree.	1	2	3	4	5
29.	My parents expect excellence from me in skiing.	1	2	3	4	5
30.	My coach expects excellence from me at all times: both in training and competition.	1	2	3	4	5
31.	I rarely feel that I have trained enough in preparation for a competition.	1	2	3	4	5
32.	If I do not do well all the time in competition, I feel that people will not respect me as an athlete.	1	2	3	4	5
33.	I have extremely high goals for myself in skiing.	1	2	3	4	5

Please complete the remaining items in this questionnaire on the next page. ☞

In your first 1-2 seasons with NDC, to what extent did you agree or disagree with the following statements?		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
34.	I develop plans that dictate how I want to perform during competition.	1	2	3	4	5
35.	I feel like my coach never tries to fully understand the mistakes I sometimes make.	1	2	3	4	5
36.	I set higher achievement goals than most skiers.	1	2	3	4	5
37.	I usually have trouble deciding when I have practiced enough heading into a competition.	1	2	3	4	5
38.	I feel like my parents never try to fully understand the mistakes I make in competition.	1	2	3	4	5
39.	People will probably think less of me if I make mistakes in competition.	1	2	3	4	5
40.	My parents want me to be better than all other skiers.	1	2	3	4	5
41.	I set plans that highlight the strategies I want to use when I compete.	1	2	3	4	5
42.	If I ski well but only make one obvious mistake in the entire race, I still feel disappointed with my performance.	1	2	3	4	5

Appendix C
Contact Information Sheet

IMPORTANT:

You just participated in Step 1 of this research study. In Step 2 a small group of athletes will be asked to take part in an interview. The purpose of the interview is to advance our understanding of how athletes respond to transitions across their athletic career. Step 2 is the final step of the study.

PLEASE RESPOND TO THE FOLLOWING THREE QUESTIONS:

1. Please provide your name (optional) _____

2. If asked, would you be willing to take part in Step 2 of the study? That is, would you be willing to take part in the interview? (Circle/highlight the appropriate option) Yes No

3. **If you answered “yes” to the previous question, please provide your primary contact information.** If you are selected as a potential participant for Step 2, the research team will use this information to contact you and to schedule an interview.

Please write legibly

Name: _____

Primary Phone Number: _____

Primary E-Mail: _____

★ *Be assured that the individual information you provide here **will be kept private.** Other than the research team, no coaches, teammates, or any other individual or organization will ever see your contact information or any of your responses to the questionnaires.*

Appendix D

Perfectionism Assessment Scale

The purpose of the following questionnaire is to assess the perfectionism levels of the NDC athletes that you coached during your tenure as head coach. Please base your ratings in relation to the broad spectrum of athletes that NDC skiers compete against across the race season. Be ensured that these ratings are completely confidential and individual athletes' ratings will not be available to the athlete or any other person outside of the research team.

Perfectionistic Strivings - *the setting of very high personal standards of performance and a personal drive to achieve perfection.*

Perfectionistic Concerns - *concerns about personal mistakes committed during performance, perceptions of others' expectations and criticisms as significant sources of pressure, and feelings of unacceptable discrepancies between one's desired and actual performance level.*

1. Perfectionistic Strivings	Far Below Average	Below Average	Average	Above Average	Far Above Average
Athlete #1	1	2	3	4	5
Athlete #2	1	2	3	4	5
Athlete #3	1	2	3	4	5
2. Perfectionistic Concerns	Far Below Average	Below Average	Average	Above Average	Far Above Average
Athlete #1	1	2	3	4	5
Athlete #2	1	2	3	4	5
Athlete #3	1	2	3	4	5

Thank you for completing these ratings. Your responses represent a valuable component of this research project.

Appendix E
Interview Guide

Rapport Questions

1. How is your season so far?
2. How is skiing now that there is snow?

Previous Team - “J u n i o r S p o r t”

“I will ask you questions regarding the team you were a member of prior to becoming a member of the national training program.”

3. Briefly describe your team prior to the national training program.
 - number of team members
 - gender
 - commitment
 - local or national
 - competition level
 - coaches
4. Did you compare yourself to your teammates?
 - training
 - performance
5. How would you judge your competition performance as compared to teammates?
 - training
6. Who were people who were positively influential to you as a skier? Why?
 - negatively
7. Describe your relationship with the coach.
8. Describe your relationship with parents.
 - teammates
 - friends
 - significant others

National Training Program - “S e n i o r S p o r t”

“Now I will ask you questions regarding your first season with the national training program.”

9. Describe the transition from your prior team to the national training program team.

10. Describe your rookie season with the national training program.
 - number of team members
 - gender
 - commitment
 - local or national
 - competition level
 - coaches
11. Did you live at home? Did this influence your skiing? How?
12. Were you starting university or college? Did this influence your skiing? How?
 - job
 - hobbies
13. Did you compare yourself to your national training program teammates?
 - training
 - performance
14. How would you judge your competition performance as compared to teammates?
 - training
15. Who were people who were positively influential to you as a skier? Why?
 - negatively
16. Describe your relationship with the coach.
17. Describe your relationship with parents.
 - teammates
 - friends
 - significant others

Difference - “Junior to Senior Sport Transition”

“Now I will ask you questions regarding how your prior team and the national training program are different.”

18. Was the coaching style at the national training program different than your prior team? How?
19. Were the team dynamics of the national training program different than your prior team? Describe.

Appendix F

Dear Potential Participant,

My name is Kaylin Kainulainen and I am a Master's Candidate at Lakehead University (LU) in the School of Kinesiology. I am doing a study with Dr. Jane Crossman, a professor at Lakehead University's School of Kinesiology. Our project is entitled: ***Investigating High Performance Perfectionist Athletes' Perceptions of the Junior to Senior Sport Transition***. You can help us with this study because you are an athlete who has gone through the transition from junior to senior sport. The purpose of this letter is to describe this project, outline your potential role in the project, and ask if you would be willing to participate in the first step of the study.

Project Focus

As implied in the title, the project is focused on how athletes experience the transition from junior to senior sport and how those experiences relate to their levels of perfectionism. This is important because researchers and sport psychologists currently disagree on whether perfectionism negatively and/or positively impacts athletes' performance and well-being. The results from the study will be able to be used to advance understanding of perfectionism and transitions and to advise coaches/sport psychologists on how to best work with perfectionist athletes. This knowledge can then be used to enhance relationships between coaches and their perfectionist athletes; as well as to help improve perfectionists' performance in, and enjoyment of, sport competition.

Athletes' Role in the Project

This project has two steps. At this point in time, we are inviting you to take part in Step 1 and asking you to consider taking part in Step 2 (if requested to do so). What follows is a brief description of each step.

Step 1 Procedures

In Step 1 you would complete a packet of surveys. Two of the surveys would ask you about your motives and goals in sport. A third survey would ask you to provide basic demographic information about yourself and your history in sport. The final survey would also ask you if you would be willing to participate in Step 2 of the study. If so, you will be asked to provide your contact information. Step 1 will take about 20 minutes of your time.

Step 2 Procedures

A small group of athletes who took part in Step 1 will be asked to take part in the second step of the project. Specifically, athletes whose Step 1 survey responses reflect a perfectionist approach towards sport will be asked to participate in Step 2. Athletes who participate in Step 2 will be asked to take part in an individual interview with a member of the research team. The goal of the interview will be to discuss the athletes' perceptions of the junior to senior sport transition. This interview will last approximately 1 hour.

With participant's permission, their interviews will be digitally recorded and transcribed into Microsoft Word document files. These files will be stored on a password-protected computer in a

locked office. Everyone will be assigned a code name and real names will not be used.

If you are willing to take part in both stages of this project, then in Step 1 you will be asked to provide your contact information. This information is needed so that the research team can contact you for Step 2. If you provide this information then your Step 1 survey responses will not be anonymous. Be assured that none of the information you provide will be shared with anyone outside of the research team. None of your coaches, teammates, parents, or any organization will gain access to your information. If you choose not to give this information, then your survey responses will remain completely anonymous. The data produced in this study will be stored in a locked office at LU. Only the research team will have access to this data. The data will be kept for 5 years after publication. Then it will be destroyed. It is our goal to publish the data in academic journals. In such a case, the data will be presented in an aggregate or case study form. In the aggregate form there will be no way to identify a single participant's responses. In the case study form pseudonyms will be used instead of athletes' real names.

A small group of athletes who take part in Step 1 will also be asked to take part in Step 2. We expect that approximately 53 athletes will take part in Step 1. However, only 10 athletes will take part in Step 2. Take note that taking part in Step 1 does not obligate you to take part in Step 2. If you choose to take part in Step 1 but do not want to take part in Step 2, please still respond honestly to the surveys in Step 1. Your responses are very valuable to us.

There are no known mental or physical risks inherent with completing the surveys in Step 1. You are free to skip any item in the surveys. Possible risks associated with participation in Step 2 revolve around the disclosure of personal or sensitive information. This may make some participants uneasy. Athletes will be told that they do not have to answer any interview questions that make them uneasy. Step 2 participants will also be given the contact information for a local sport psychology consultant in case they would like to talk to someone about issues that arose as a result of their participation in this project.

A potential benefit of taking part in this study is that you may gain a deeper understanding of what drives you in sport. You may also better understand what effect this has on your life. Your information may assist coaches/sport psychologists in their work with athletes. It is my hope that such information will be used to help improve athletes' performance and overall well-being.

The study has been approved by Lakehead University's Research Ethics Board (REB). Your coach has also approved the study. Take note that your decision to take part in either step of this study is completely voluntary. You may decline to take part or drop out from any step of the study for any reason with no consequences. Should you decide not to take part, you can tell anyone on the research team at any time. This can be expressed verbally or in writing. Your information will then be taken out of the study. This will have no effect on your playing status. Your coaches will not know if you took part in either step of the study.

Please feel free to contact any research team member if you have any questions about the study. Our phone numbers and e-mails are listed below. Please contact the Research Ethics Board at Lakehead University (c/o Office of Research, 807-343-8283) if you wish to speak to someone who has no direct involvement with this study. You can get a copy of the final report by

contacting Jane Crossman when the study is finished.

We hope that you will consider taking part in the study. You will be helping us learn more about high level athletes.

Thank you for your time.

Sincerely,

Jane Crossman, Ph.D.
Professor and Graduate Coordinator
Lakehead University
807 343-8642
jane.crossman@lakeheadu.ca

Kaylin Kainulainen, HBK
Master's Candidate
Lakehead University
807-683-7147
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Appendix G

ATHLETE CONSENT FORM

Title of Project: *Investigating High Performance Perfectionist Athletes' Perceptions of the Junior to Senior Sport Transition - Step1*

Principal Investigator: *Dr. Jane Crossman, Lakehead University, (807)343-8642, jane.crossman@lakeheadu.ca*

Student Investigator: *Kaylin Kainulainen, Lakehead University, (807)683-7147, kkainula@lakeheadu.ca*

To be completed by the research participant:

Do you understand that you have been asked to take part in Step 1 of the above mentioned research study?	Yes	No
Have you read and received a copy of the attached Information Sheet?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Have you had an opportunity to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse to participate, to decline to answer any question, or to withdraw from the study at any time, without consequence, and that your information will be removed from the study at your request?	Yes	No
Do you understand that participation in Step 1 of this study does not in any way oblige you to take part in Step 2 of the study?	Yes	No
Has the issue of confidentiality been explained to you?	Yes	No
Do you understand who will have access to your data?	Yes	No
Do you understand that, while you will wave your right to anonymity if you wish to be considered as a potential participant in Step 2, your anonymity will be maintained in any future presentation or publication of the data?	Yes	No
Do you understand that the information you provide in this study will be kept in locked storage in a secure office at Lakehead University for five years?	Yes	No
I agree to take part in this study	Yes	No

Date

★ *Participants can contact Dr. Jane Crossman for a free summary of the results of this study following the completion of the project.*

Appendix H

Dear Coach,

My name is Kaylin Kainulainen and I am Master's Candidate at Lakehead University (LU) in the School of Kinesiology. I am doing a study with Dr. Jane Crossman, a professor at Lakehead University's School of Kinesiology. Our project is entitled: *Investigating High Performance Perfectionist Athletes' Perceptions of the Junior to Senior Sport Transition*. The purpose of this letter is to describe this project, outline your potential role in the project, ask for your signed consent to participate in the study, and ask if I could meet with your team to see if they would be willing to participate in the study.

Project Focus

As implied in the title, the project is focused on how athletes perceived a junior to senior sport transition in relation to their levels of perfectionism. This is important because researchers and sport psychologists currently disagree on whether perfectionism negatively and/or positively impacts athletes' performance and well-being. The results from the study will be able to be used to advance coaches' understanding of perfectionism and transitions and to advise them on how to best work with perfectionist athletes. This knowledge can then be used to enhance relationships between coaches and their perfectionist athletes; as well as to help improve perfectionists' performance in, and enjoyment of, sport competition.

Coaches' Role in the Project

We would like your help with three important aspects of this study. First, we would like to ask your permission to meet with your team. At this meeting we would ask your athletes if they would consider taking part in the project. Second, we would like you to give out information packets to your team. These will spell out how the study will work. The athletes will then be able to make an informed decision about taking part in the study. Third, we would like you to help us assess your athletes' levels of perfectionism. Specifically, we would like you complete the attached rating form. I expect that it will take you approximately 15 minutes to complete the form once we've had a couple of minutes to discuss exactly how we view perfectionism in sport psychology.

Given that you are the only person being asked to rate your team, anonymous responses are not possible. However, the confidentiality of your responses will be strictly maintained. All of your responses will be kept securely in a locked office and no one outside of the research team will have access to your responses. After a period of 5 years, hard copies of your responses will be destroyed. There are no inherent risks to your participation and your responses will help us better understand athletes.

Athletes' Role in the Project

Athletes' participation in this project would span two steps. Below is a summary of the two steps:

Step 1 Procedures

(1) The date and time for an information meeting would be set based on the needs of your team. The meeting would take place at least 24 hours before any competition.

(2) During this meeting the athletes would complete a brief packet of surveys. Two of the surveys would ask athletes about their motives and goals in sport. A third survey would ask athletes to provide basic demographic information about themselves and their history in sport. The final survey would ask athletes if they would be willing to take part in Step 2 of the study. If so, athletes will be asked to provide their name and contact information. (Copies of the surveys have been attached).

(3) The questionnaire packet will take about 20 minutes for the athletes to complete.

Step 2 Procedures

A small group of athletes who took part in Step 1 will be asked to take part in the second step of the project. Specifically, athletes whose Step 1 survey responses reflect a perfectionist approach towards sport will be asked to participate in Step 2, which is an interview. The goal of the interview will be to discuss the athletes' perceptions of their transition to senior sport. The interviews will last approximately 1 hour and will be voice-recorded.

Ethical Issues Regarding Athletes' Participation

(1) Athletes' decisions to take part in the study will be entirely voluntary. Athletes will be told that their decision to take part will have no impact upon their team status.

(2) If athletes are willing to take part in Step 2, then in Step 1 they will be asked to provide their contact information. This information is needed so that the research team can contact the athletes for Step 2. If athletes choose to provide this information then their Step 1 survey responses will not be anonymous. No athlete's information will be shared with anyone outside of the main research team. None of their coaches, teammates, parents, or any outside individual/organization will be granted access to any of their information. All of this will be emphasized to athletes during information sessions prior to each step of the study. Athletes will be asked to provide written consent to waive their right to anonymity.

(3) The responses of athletes who do not provide contact information will remain completely confidential and anonymous.

(4) Coaches will be asked to leave the room during the Step 1 survey completion. Coaches will not be told which athletes were asked to take part in Step 2. Coaches will also not be told which athletes accepted this request. Coaches also will not have access to data specific to any member of their team.

(5) There are no mental or physical risks associated with completing the surveys in Step 1. Possible risks associated with participation in Step 2 revolve around the disclosure of

personal or sensitive information. This may make some participants uneasy. Athletes will be told that they do not have to answer any interview questions that make them uneasy.

(6) The Research Ethics Board at Lakehead University has given us permission to conduct this study. (Copies of the information letters and consent forms that would be used in the study have been attached).

(7) Athletes may decline to take part or drop out from any step of the study for any reason with no consequences.

Data Access and Presentation

(1) All data will be stored in a locked office at Lakehead University. Only the research team will have access to this office.

(2) All data will be destroyed five years post-publication.

(3) A report of the study's findings can be provided to your team. This report will be available upon completion of the project.

(4) We will be happy to discuss any aspect of the study with you at any time.

We will be contacting you by phone or in person to clarify our study. Please feel free to contact us if you have any questions about the study. Our phone numbers and e-mails are listed below. Please contact the Research Ethics Boards at Lakehead University (c/o Office of Research, 807-343-8283) if you wish to speak to someone who has no direct involvement with this study.

We hope that you are (a) are willing to participate in this project (as outlined in the "Coaches' Role in the Project" section) and (b) will allow us to approach your team about this study. If so, **please complete and sign the attached consent form.** Your assistance and participation will be a valuable component of the project.

Thank you for your time.

Sincerely,

Jane Crossman, Ph.D.
Professor and Graduate Coordinator
Lakehead University
807 343-8642
jane.crossman@lakeheadu.ca

Kaylin Kainulainen, HBK
Master's Candidate
Lakehead University
807-683-7147
kkainula@lakeheadu.ca

COACH CONSENT FORM

Title of Project: *Investigating High Performance Perfectionist Athletes' Perceptions of the Junior to Senior Sport Transition*

Principal Investigator: **Dr. Jane Crossman, Lakehead University, (807)-343-8642, jane.crossman@lakeheadu.ca**

Student Investigator: **Kaylin Kainulainen, Lakehead University, (807)683-7147, kkainula@lakeheadu.ca**

Do you understand that you and your athletes have been asked to be in a research study? Yes No

Have you read and received a copy of the attached Information Sheet? Yes No

Do you understand the benefits and risks involved in you and your team's participation in this research study? Yes No

Do you understand that you and your athletes are free to refuse to take part, to decline to answer any question, or to drop out from the study at any time, without consequence, and that the information you and your athletes provide will be removed at your/her/his request? Yes No

Has the issue of confidentiality been explained to you? Yes No

Do you understand who will have access to your data? Yes No

Do you understand that your responses will not be anonymous if you choose to participate in this study? Yes No

Do you understand that the information you provide in this study will be kept in locked storage in a secure office at Lakehead University for five years? Yes No

I agree to participate in the study and grant permission for the research team to approach my team as potential participants in the project.

Signature of Participant

Date

Printed Name

★ *A free summary of this study's results can be obtained by contacting Dr. Jane Crossman once the project has been completed.*

Appendix I Example of Coding Map

