STRESS EPISODES AND ADAPTATION IN THE NATIONAL HOCKEY LEAGUE
ACCORDING TO CANADIAN PROFESSIONAL HOCKEY PLAYERS FROM ONTARIO

by

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Abstract

Adaptation in professional sport is the professional athlete’s capacity to act and react effectively to destabilizing stress episodes so that an internal sense of emotional and psychological balance is restored (Schinke, Tenenbaum, Lidor & Battochio, 2010). Professional ice-hockey players must overcome numerous stressors throughout their careers in the National Hockey League (NHL). Though sport researchers have conducted preliminary studies about the stress and adaptation processes of NHL players, small participant numbers and the use of a structured interview guide limited to rookie and veteran career stages limit the conclusions. Based on these limitations, the purpose of the present dissertation was to provide a comprehensive depiction of the stress episodes and processes that lead to adaptation and maladaptation in the NHL. Twenty-three current and former NHL players were recruited for individual interviews, which were then analysed using Braun and Clarke’s (2006) inductive thematic analysis. As a result, stress episodes and the subsequent strategies attempted to reach adaptation or maladaptation could be housed either within a career stage or across an NHL player’s career. Career stages were (a) entry into the NHL, (b) remaining in the NHL, and (c) becoming an All-Star. Across-career stress involved (a) high profile team, (b) injury, and (c) relocation. Subsequently, the participants identified pathways designed to alleviate or manage the stressors situated within each stress episode. Through retrospection, the participants decided whether their pathways taken during various stress episodes were adaptive. Recommendations were then proposed by these athletes for aspiring NHL players or maladaptive. Implications for sport researchers and practitioners (e.g., coaches, mental performance consultants) are also provided within the conclusion.

Keywords: National Hockey League, Adaptation, Stress, Maladaptation, Support Network
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Chapter 1

1 Introduction

The National Hockey League (NHL) is situated in North America and considered the premier professional hockey league in the world (Perlini & Halverson, 2006). The league is comprised of 30 teams located in major cities throughout the United States of America (e.g., New York, Chicago, Los Angeles) and Canada (e.g., Toronto, Montreal, Vancouver). Montreal, Ottawa, Toronto, Calgary, Edmonton, and Vancouver are Canadian cities that host NHL teams that were constantly among the most well attended home games in the league, operating at full capacity (Entertainment and Sports Programming Network, 2010). Even Forbes (2009) ranked teams in Toronto (i.e., $470,000,000) and Montreal (i.e., $339,000,000) among the top 3 most valuable NHL teams. The sport is so popular in Canada that it is the country’s official winter sport (Sport Canada, 1994).

Hockey Canada (2010), the state’s governing body of the sport, recorded over half of a million ice-hockey players registered on a minor ice-hockey or junior team each year for the past 10 years. Many NHL teams recruit players directly from Hockey Canada’s programs, with 476 out of 862 NHL players, or approximately 55% of all players, born in Canada (National Hockey League, 2012). Canada is not the sole country where NHL teams recruit players. The United States make up about 22% of the population, 6% of the population are from Sweden, another 6% from the Czech Republic, 4% of the players are Russians and 3% are from Finland (National Hockey League, 2012). Players relocate from the aforementioned countries as well as a few others to compete for the highest salaries available in professional ice-hockey. An NHL player’s minimum salary in 2005-06 and 2006-07 was $450,000; $475,000 in 2007-08 and 2008-09; $500,000 in 2009-10 and 2010-11, and $525,000 in 2011-12 (National Hockey League, 2012).
To sign a contract in the NHL, players must overcome numerous stressors at the beginning of their professional careers (Battochio, Schinke, Battochio, Eys, Halliwell, & Tenenbaum, 2009; Hagy, 2002). Prospects are faced with short-term stressors such as demands from NHL scouts throughout their draft-eligible season while the notion of having to be prepared to one day compete against veteran players that likely possess superior athletic abilities was an example of a chronic stressor. For rookies, training camp can be viewed as a short-term stressor while constantly being aware of the manager and coach’s expectations regarding their role on the team was a chronic stressor. As for veterans, media demands is an example of a short-term stressor while being aware of the responsibilities (e.g., leadership) assigned from coaches and managers that supplement pre-existing responsibilities related to one’s role on the team appears to be a chronic stressor.

Once an NHL player encounters a stress episode, attempts are made to re-establish a sense of ease. Adaptation in sport is the athlete’s capacity to act and react competently to perceived stressors in a stress episode by restoring an internal sense of emotional and psychological balance (Schinke, Tenenbaum, Lidor, & Battochio, 2010). Adaptation is the product of a comprehensive process that begins with an effective appraisal of a stressor and was achieved through the utilization of carefully chosen coping strategies (Lazarus & Folkman, 1984). According to Schinke, Battochio, Lidor, Tenenbaum, Dubé, and Lane (2012), the outcome of adaptation is achieved through four stages: (a) stress appraisal, (b) coping, (c) social support, and (d) all integrated within Fiske’s (2004) adaptation pathways. The first step towards adaptation is an effective primary and secondary appraisal of the stressor. If a stressor is perceived as being negative and taxing, yet worth overcoming, coping responses are selected in accordance with the stressor. The second step is applying the correct coping response, either
problem or emotion-focused responses. Outside of establishing the first two steps, Lazarus and Folkman indicated that stress appraisal and coping can be influenced by one’s social support network that support or discourage one’s ambitions dependent on their response to the athlete. The final step of adaptation pathways is comprised of understanding, controlling, and self-enhancement strategies that overlap with the first and second step. Yet Fiske’s framework also includes two interpersonal pathways for athletes struggling to overcome a stressor, which corresponds with Lazarus and Folkman’s (1984) social support in the sense that athletes rarely overcome stress without assistance. The two strategies (i.e., belonging and trusting) are about developing strong relationships with others for support when struggling or assistance when responsibilities need not rest squarely on the athlete’s shoulder respectively.

1.1 Gaps in the Literature

Following a review of the literature about NHL players, stress, coping, and adaptation, there were four gaps. First, sport researchers have only provided empirical support for one limited theoretical framework about adaptation (i.e., Fiske’s pathways) and the framework does not include the highly-relevant sequential concepts of (a) stressors, (b) stress appraisal, (c) coping, and then as the outcome, (d) adaptation. Fiske’s pathways are general processes leading to adaptation and only part of a more comprehensive depiction of the adaptation process (see Schinke et al., 2012). As a result, the present dissertation pertains to the experiences of NHL players through a more comprehensive – sequence bound theoretical lens. Second, previous studies about NHL players have been limited by the methodological approaches used by sport researchers. Many studies have included quantitative tools, which generated findings about the NHL through readily available public data (Hagy, 2002). Recently, attempts have been made to use qualitative methodologies with second-hand data such as newspaper articles (e.g., Schinke,
Battochio, Dubuc, Swords, Apolloni, & Tenenbaum, 2008; Schinke, Gauthier, Dubuc, & Crowder, 2007) and first-hand data (e.g., Battochio, Schinke, Battochio, Halliwell, & Tenenbaum, 2010) through informal individual interviews with hopes of generating a greater depth of knowledge about their careers in the NHL. Newspaper articles have also been limited since researchers have no control over the lines of questions used by journalists, preventing any follow-up inquiries and also, in-depth exploration. As for individual interviews, the lines of questions were used to learn about the stress experienced at the rookie and veteran career stages without any concern over stress experienced throughout an athlete’s career (e.g., sophomore jinx, injury). The intent in the present dissertation was to hold unstructured interviews with each participant to learn about the stress episode or series of episodes relevant to their careers. With unstructured interviews, the participants led conversations while the interviewer followed-up with Patton’s (2002) probe questions to learn more about the most salient episodes from the vantage of the athletes throughout their career and the adaptation strategies used to respond. A total of 23 participants were recruited for this project. Afterwards, the data collected from the individual interviews was subjected to a thematic analysis. In the present dissertation, the participants described the stress episodes they experienced as NHL players and the pathways used to alleviate stress. Third, during previous studies with NHL players, scholars only recruited a maximum of three NHL participants according to the following career stages: rookies, veterans, and retirees. Thus, the findings in Hagy’s (2002) as well as Battochio, Schinke and colleagues’ (2009; 2010) investigations ought only to be regarded as a catalyst to the current project. To generate a more comprehensive depiction, five rookies, five veterans, and 13 retired players were recruited as a convenience sample. Lastly, there is little information about the means by which teammates, coaches, sport psychologists or others have aided or prevented NHL
participants from adapting to a stress episode. Combined, these uncharted areas provide openings for scholars to consider, leading to the conceptualization of this project.

1.2 Purpose

Based on the aforementioned four literature gaps, there were three purposes for the present dissertation. First, stress episodes that de-stabilize (i.e., necessitate adaptation) NHL players throughout their careers were described as well as the corresponding stressors associated with each episode. Second, once a player described a stress episode, the subsequent process that led to adaptation was delineated. The pathways selected by the participants in an attempt to achieve adaptation were identified. However, not all pathways led to adaptation. Instead, participants employed strategies that were maladaptive. Third, the strategies attempted by the participants to reach adaptation could have been supplemented by contributions from members of the participants support network. To garner each participant’s views of their NHL careers, unstructured individual interviews were held so that participant could voice their stressful experiences in addition to their attempts at alleviating the stress. The completion of the present dissertation yielded information that was valuable to aspiring athletes, coaches, as well as sport psychology researchers and consultants in the NHL context.
1.3 Research Questions

1. Through the use of an unstructured conversational interview, what stress episodes did the participants in the NHL experience?

2. In relation to each stress episode, what processes were being employed to seek the outcome of adaptation?

3. How might the athletes’ social support network help prospective or current NHL players navigate through their various stress episodes?

1.4 Delimitations

Despite the potential responses that could arise from the research questions, three delimitations must be acknowledged since they constrained the present dissertation. First, Patton’s (2002) purposive convenient sampling method was employed meaning that the recruitment method was limited to accessible NHL players to me. Since the present dissertation was being conducted out of one Canadian region, northern Ontario, many of the participants had contacts to the area. Hagy (2002) noted that recruitment letters, though useful in obtaining a few retired NHL participants, were not an effective means to recruit active NHL players. So, participants were recruited based on accessibility. Precisely, the participants and I had an established relationship or I approached friends and family members about recruiting an NHL player. Second, participants were asked to retrospectively recall their stress episodes and corresponding responses. Therefore, an attempt was made to recruit players that were retired, at most 15 years ago, to delimit factors known to affect long-term memory such as distortions and/or biases (Schinke & da Costa, 2000). Lastly, an unstructured conversational interviews and an inductive thematic analysis were employed to answer the research questions in the present dissertation. The methodological approach enables for participants to share their experiences however unique
they may seem. After the analysis, the participants were approached for a second interview and in some cases, a third interview, to ensure that the stress episodes experienced were well encapsulated after the thematic analysis. The follow-up interviews served as an opportunity to verify the findings and their relevance to stress episodes.
1.5 Contextual Definitions

**Adaptation.** Adaptation is the athlete’s capacity to act and react competently to destabilizing stressors within a stress episode by restoring an internal sense of emotional and psychological balance (Schinke, Tenenbaum, Lidor & Battochio, 2010). An unresolved stressor could potentially limit the longevity of a professional hockey career while resolving stress can prolong it. The sense of balance can also be facilitated or jeopardized by coaches, teammates, and family members situated within a player’s support network.

**Belonging.** Belonging is a pathway that highlights the idea that people desire stable relationships with others because it helps them fit into groups, and then subsequently, seek out effective social support resources (Fiske, 2004). In the NHL, team and family members were effective resources (Battochio et al., 2010). Team support typically involves words or gestures of support directed towards the athlete to help them fit into the team. Support from family members usually includes verbal encouragement while the athlete was in the NHL and personal sacrifices like spending their time and financial resources on the athlete during formative years.

**Competitive stress.** The internal and/or external demands experienced by athletes in a competitive context (Hanton, Fletcher, & Coughlin, 2005). Internal demands can be comprised of objectives set by athletes in a game while an external demand may be the obligation to meet with media members immediately following games.

**Controlling.** Controlling is a pathway that encourages people to feel effective in interacting with their environment, and with themselves (Fiske, 2004). NHL players expressed control when they were confident, assertive, and when they managed distractions (Battochio et al., 2010). Confidence is the NHL player’s belief in his ability to meet the expectations associated with his role on the team. Assertiveness is the athlete’s aggressive attempt at
establishing a sense of control over the environment (e.g., opponent) or themselves (e.g., aggressive behavior in game). Finally, distraction control was when athletes pay attention to task relevant information.

**Coping.** Coping is the cognitive and/or behavioural efforts employed by the NHL participants following the onset of internal or external stress. Efforts are employed with hopes of effectively managing the NHL stressor since it was appraised as relevant to and a potential thwarter of goal attainment (e.g., entry into NHL, becoming All-Star). (Lazarus & Folkman, 1984).

**Organizational stress.** Organisational stress is the internal or external demands experienced by athletes in an organizational setting (Hanton, Fletcher, & Coughlan, 2005). For NHL participants, internal organizational stress could be their attempts to uncover common interests held with each other while external stress could refer to making the team during training camp.

**Self-enhancement.** Self-enhancement was a pathway that involves garnering the requisite skills that lead to self-improvement or help maintain self-esteem (Fiske, 2004). Enhancement occurs in the NHL when players express a strong work ethic and open approach to learning (Battochio et al., 2010). Consistently engaging in high-intensity training shows a strong work ethic while an open approach to learning was characterized by a willingness to know more about one’s physical and mental abilities as an NHL player.

**Stress.** Stress is the external and/or internal demands that were appraised as relevant to and potential nuisances of goal attainment (Lazarus & Folkman, 1984). Stress can arise throughout an NHL player’s career and its alleviation depends on whether it is deemed relevant to seeking out or prolonging one’s NHL career.
**Trusting.** Trusting is an adaptation pathway that involves confidence and/or faith that another will help one manage or avoid adversities that were not personally controllable (Fiske, 2004). Coaches, teammates, and agents have been identified among those that were trusted by NHL players (Battochio et al., 2010). Trusting coaches was described as the athlete’s degree of confidence in the coach’s decisions. The degree was greater when the athlete and coach have successfully worked together beforehand or if the coach has previous experience in the NHL. Trusting teammates was described as the athlete’s degree of confidence in their teammate’s ability to meet the expectations associated with their role on the team, either on the ice and/or in relation to daily tasks such as punctuality. Finally, trusting agents was the athlete’s degree of confidence in their agents who were expected to have an in-depth understanding of the financial aspects associated with player contracts in the NHL and how to maximize the benefits of being a professional hockey player in the NHL.

**Understanding.** Understanding was a pathway whereby people try to make sense of their environment, and predict what was going to happen in moments of uncertainty, such as ambiguous sporting contexts (Fiske, 2004). In the NHL, players must understand their role within the team structure, which corresponds with the athlete’s strengths and weaknesses. Further to being aware of their athletic abilities, NHL players must understand the expectations associated with their role on the team (Battochio et al., 2010).
1.6 Methodological Definitions

**Descriptive validity.** Descriptive validity is about evaluating the accuracy of a participant’s account. A high level of accuracy, such as verbatim transcription from an audio-recorder, means that researchers are not manipulating the data collected (Maxwell, 2002).

**Epistemology.** Epistemology is concerned with knowledge or what we know about truth and how we can know it (Willis, 2007). Examples of epistemological questions were what knowledge is, how was knowledge acquired, how was knowledge truthful, and what were the limits of our knowledge? Within the context of the present study, steps related to validity have been taken to ensure that the findings reflect the experiences of the participants.

**Generalizability.** Generalizability refers to the extent to which an account of a particular phenomena described by an individual or group can be applied to other persons, times, or settings (Maxwell, 2002). Caution will be needed when interpreting the findings onto groups of athletes outside of male professional ice-hockey players.

**Informal conversational interview.** An informal conversational interview is an exchange of information without the use of a structured interview guide. In this case, NHL participants will know about the purpose of the study and share stress episodes relevant to their careers. The interviewer follows with probe questions to elicit detail, clarification, and elaboration whenever possible.

**Interpretive validity.** Interpretive validity is achieved through attempts by researchers to understand the findings from the perspective of those participating in the study instead of simply the researchers’ perspective (Maxwell, 2002). Following the inductive thematic analysis, the participants will be given an opportunity to review the findings and ensure that they accurately reflect their careers in the NHL.
**Ontology.** Ontology is concerned with the nature of truth and various ontological beliefs reflect different values of what can be true and what cannot (Willis, 2007). A common ontological question might include the characteristics of existence or things that exist. Here, measures (e.g., validity) are put into place to ensure that the stress episodes and adaptation strategies are actually attempted by NHL players.

**Portrait vignette.** Portrait vignettes are first-hand representation of the participant’s experiences. They typically include citations from an interview transcript or at least make reference to available first-hand data (Ely, Vinz, Downing, & Anzul, 1997). In the result section, each stress episode concludes with a portrait vignette used to summarize the pathways taken by the participants in an effort to resolve the stress episode (see Dubuc, Schinke, Eys, Battochio, & Zaichkowsky, 2010; Hughes & Huby, 2002).

**Realism.** Researchers that subscribe to realism search for one truth that can only be achieved through techniques that distance them from their work (i.e., objectivity) (Willis, 2007). Within the present dissertation, a realist subscription has led to the implementation of measures designed to obtain the truth (i.e., validity).

**Theoretical validity.** Theoretical validity refers to the extent that themes and patterns within the findings can be associated with key concepts and relationships within the literature (Maxwell, 2002). The relationships must also exist between themes and patterns in the findings with a level of coherence that can discerned.
Chapter 2

2 Review of the Literature

Sport researchers have identified numerous stressors experienced by elite amateur and professional athletes and explained that these stressors were overcome using stress appraisals, coping strategies, and adaptation strategies. The forthcoming literature review is comprised of the aforementioned concepts and how they have been articulated in elite amateur and professional sport, with an emphasis on professional sport, since it is more pertinent in the current project. The review is comprised of four general sections: (a) stress, (b) stress appraisal, (c) coping, and (e) adaptation. Lastly, gaps – uncharted areas in the literature are identified leading to the study’s purpose and research questions.

2.1 Stress

Stress is a multi-dimensional construct that arises in a multitude of contexts such as work, school, and family (Aspinwall & Taylor, 1992; Aycan & Berry, 1996). Stress has been commonly defined as “external and/or internal demands that were appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 52). In a general sense, demands originate from the individual (i.e., internal) or the environment (i.e., external) and are perceived to require a corresponding effective response if the individual’s intention is to restore a sense of psychological equilibrium. Folkman and Moskowitz (2004) indicated that stress arises when individuals are faced with major life events. Elite amateur and professional sport athletes are faced with major experiences including promotion, retention, injury, and relocation among others (Schinke et al., 2012). For elite amateur athletes, qualifying for one’s first Olympic Games is considered to be a major sporting challenge while professional athletes from ice-hockey have
identified being promoted to the National Hockey League (NHL) and competing in the Stanley Cup playoffs as significant challenges in their careers. During major sport challenges, elite athletes encounter a variety of acute and/or chronic stressors; aspects sport researchers have inquired about in many different ways. Forthcoming is a chronological presentation of the studies in which the stressors experienced by elite amateur and professional athletes have been identified. Afterwards, an attempt is made to re-organize the stressors into stress episodes that in turn, necessitate adaptation.

2.1.1 National elite amateur athletes

Though they were not the first to write about stress, Scanlan, Stein, and Ravizza (1991) were among the first sport researchers to identify the sources of stress experienced by elite athletes when they examined the stressors experienced by 26 figure skaters (15 male, 11 female) that had at least competed at the national championships. The authors conducted structured individual interviews with the participants, which included five Olympians and three World Championship competitors. An inductive content analysis yielded the following themes of (a) negative aspects of competition, (b) negative significant-other relationships, (c) demands and costs of skating, (d) personal struggles, and (e) traumatic experiences. Negative aspects included pressure to improve during training for competition, worries about competition, failing during competition, personal competitive hurdles such as superstitions, and the implications of the competition. Negative significant-other relationships were characterized by interpersonal conflicts, unrealistic expectations from parents and coaches, constant criticism, skating politics, and psychological warfare. Costs, time commitments, and lack of support were part of the third category of demands and costs of skating. The fourth category of personal struggles included physical and mental difficulties while the final category of personal trauma pertained to family disturbances
and a loved one’s death. In relation to the present dissertation, the findings offer a starting point in terms of the stress experienced in elite competition. More importantly, there are maladaptive components (e.g., lack of support, anxieties, failure) that exacerbate stress levels in elite competition, which ought to be considered.

Gould, Finch and Jackson (1993) sought to learn about the stress of figure skaters from the United States competing in their national championship. The skaters were 3 female skaters in singles, 6 pair skaters, and 4 pairs of ice dancers for a total of 17 participants (10 female, 7 male). The authors held individual interviews that were less structured than Scanlan and colleagues’ (1991) study but they employed the same inductive content analysis. The results were organized according to two chronological phases: (a) national championship competitors, and (b) national champions. The first phase included participants that competed as senior skaters in national championships. The second phase included participants that were national champions. The stressors in phase one included: (a) high standards based on expected potential, (b) environmental demands, (c) competitive anxiety and doubts, (d) stress related to significant others, (e) physical demands, and (f) miscellaneous stress resources such as skating one or two competitive events. For phase two, the stressors were: (a) relationship issues, (b) expectations and pressure to perform, (c) psychological demands, (d) physical demands, (e) environmental demands at elite level, (f) life-direction concerns, and (g) miscellaneous sources of stress including politics and disruptions at Olympic Games. An examination of the stressors experienced during both phases reveals some consistencies and discrepancies. The consistencies within each phase included: (a) physical demands placed on skaters’ resources, (b) competitive anxiety, doubts and psychological demands experienced by the skaters, and (c) environmental demands. Skaters in each phase believed they encountered physical demands, experienced
anxiety and self-doubt, and had to prepare for environmental demands prior to competition. Examples of discrepancies in phase one and two related to expectations and relationship issues. In the first phase, skaters were trying to become national champions and wanted to prove they were self-sufficient thus underestimating the contributions of others. Meanwhile, skaters in the second phase realized their potential and were national champions. They had proved their worth and were more ready to attribute parts of their success to others. In relation to the present dissertation, NHL players have experienced many of the same stressors and regrouping these stressors according to their career stage could be an opportunity to compare and contrast the stress experienced in order to determine their relevancy at a career stage.

2.1.2 Olympic athletes

The Olympic Games is stressful since they are an elimination event considered to be the pinnacle of elite amateur sport (Haberl, 2009). Olympic athletes compete with and against the best in their sport discipline and could potentially gain recognition, generate sponsorship, and achieve a highly valued performance result (Haberl, 2009). Forthcoming is a review of the stressors associated with competing at the Games.

Orlick and Partington (1988) were the first to consider Olympic stressors, described as barriers therein, when they interviewed 75 elite athletes (37 females and 38 males) that represented Canada at 17 Summer and Winter Olympics. The purpose of their study was to learn about the mental training skills used by Canadian Olympians and through such discussions, identify the barriers (i.e., stressors) to optimal performance at the Games. Letters were mailed from an administrative leader (i.e., director of Sport Canada) and individual interviews were held to ensure participation at the athlete’s earliest convenience. Following a comprehensive data analysis protocol, the stressors were: (a) changing what works, (b) late selection, and (c)
overwhelmed by distractions. The first stressor occurred while, in preparation for the Games, athletes augmented their training regimes and modified their preparation strategies with hopes of achieving optimal performance. However, the modifications hindered athletic performance. When the intensity of the regimes increased, complaints about fatigue were common while strategies that led to success were modified without due consideration, leading to performance decrements. The second stressor occurred because the Olympic team selection process was completed only weeks before the Olympics. Once athletes qualified, they felt relieved of pressure to be a part of the team and had little time to rest and refocus and adjust to preparing for the Olympics. The final stressor was the multitude of sport disciplinary events and people that attended the Olympics and how they were perceived as distractions. The Olympics are heavily attended by the public and there are ceremonies, many people in the Athlete’s Village, increased media members, and elevated expectations. For major games athletes, they are generally prepared to handle the stressors encountered in and outside of competition. However, athletes may feel overwhelmed and uncomfortable because of the sheer magnitude of each stressor, which is incomparable to those experienced at any other sporting event. In relation to the present dissertation, NHL players may experience similar stressors when their teams qualify for the NHL’s Stanley Cup playoffs, a major elimination tournament. Sixteen out of 30 teams with the highest record qualify for the playoffs. After qualifying, it is possible for a team to be eliminated quickly and see their NHL season end prematurely, which can devastate teams that were expected to contend for the Stanley Cup.

With hopes of examining one Olympic sport discipline, Gould, Eklund, and Jackson (1993) assessed the stressors experienced by wrestlers from the United States competing at the 1988 Olympic Games. The authors held individual interviews where the content was guided by
eight research topics (e.g., Olympic goals, coping strategies) and then inductively analyzed according to 8 steps. As a result, the stressors encountered were unforeseen events, travel, performance expectations, pressure from the media, and the competition itself (e.g., ego concerns, potential injury). When researchers focus on one sport discipline, a greater sense of the stress and its manifestation can be elicited. Gould, Guinan, Greenleaf, Medbery, and Peterson (1999) added to the aforementioned stressors by comparing and contrasting American Olympic teams that met pre-Olympic expectations with those that did not. The four teams that failed to meet expectations were of interest since they identified the stressors that were not effectively managed. The first team physically over-trained for the Games and did not recover well enough. There were also cohesion problems since the athletes were selected three weeks prior to the Games and many of them had not previously competed together. The second team believed the selection process was also too close to the Games and that their coach was only concerned about public relations, not team performance. The third team identified over-training and lack of recovery as stressors in addition to many novel stressors such as insufficient communication from the coach, difficulties securing tickets for family, disproportionate media attention among athletes, sponsorship issues, indecisiveness from coach, and athletes refusing to do their responsibilities. The final team attended the opening Olympic ceremony and did not recover adequately for their match on the next day. There was also a lack of cohesion, an inability to manage distractions, pressure from family and friends, as well as a breakdown from the plan to manage media demands. From the two aforementioned studies, additional information about the stressors encountered at one stressful event, the Olympics, has been gleaned. The stressors identified by Gould and colleagues as well as Orlick and Partington (1988) were compared and contrasted with the stressors experienced by NHL players, especially during the playoffs. The
NHL playoffs are an elimination tournament that is the culmination of a team’s season. They must qualify for the playoffs, which is similar to the Olympic Games. Upon qualifying, there are stressors (e.g., high quality opponent, pressure from team) that render both major tournaments complicated and difficult.

Outside of stress research using the first-hand experiences of Olympic athletes, some sport practitioners have also shared their experiences (i.e., second-hand) helping athletes with stress at the Olympics. Haberl (2009) worked with the United States Olympic Committee as a sport psychology consultant over six Olympic Games and identified the stressors that he believed prevented American Olympic medal favourites from realizing their potential. Haberl listed many of the stressors previously identified in earlier empirical studies about Olympians but noted that the stressors were intensified by the difficulties he experienced accessing his athletes. During Olympic competition, only a limited number of accredited individuals were permitted to remain with the athletes and they were left without a sport psychology consultant or other viable members of their support network. Haberl also noticed that, in most instances, the sporting venues were located near the Athlete’s village. Despite being in close proximity, the athletes and coaches experienced delays and difficulties accessing the venue because of security measures and doping control requirements. Lastly, Haberl spoke about concentration and how the pressure of succeeding despite many intensified stressors could shift the Olympian’s focus away from the task at hand. Hodge and Hermansson (2009), a mental trainer and a psychologist, respectively, for the New Zealand Olympic teams, outlined numerous challenges that when combined, left New Zealand athletes feeling stressed in the “circus-like atmosphere” (p.55) of the Olympics.

From the work of sport researchers and consultants, a comprehensive list of stressors can be organized to understand the underlying reasons why the Olympics were a stress episode.
Olympians can be de-stabilized when attending the Games and similar arguments have been made about the NHL’s Stanley Cup playoff, which was a stressful elimination-type challenge for the participants in the present dissertation. The Stanley Cup playoffs can also be accompanied by a circus-like atmosphere that can invade or distract an NHL player’s concentration to winning the Stanley Cup. For example, fans and media members follow their teams’ closely compared to the regular season and profile controversial situations or relationships as side shows to the Stanley Cup. Within the present dissertation, examples of these distractions were sought.

2.1.3 Stress in professional football

Two cultural groups of professional football players in the Australian Football League have been examined by sport researchers on two separate occasions. The Australian Football League was largely comprised of two cultural groups: mainstream Australians and Australian Aborigines. Noblet and Gifford (2002) held semi-structured interviews with 32 mainstream Australian football players varying in relation to their level of experience in the league. The interviews were either held in a group or individually (i.e., four group, and eight individual). Following an inductive content analysis, the stressors could be grouped into six themes (a) negative aspects about organization such as poor communication and low participation in decision-making, (b) worries about performance such as poor form or difficult expectations, (c) career development concerns, (d) negative aspects of interpersonal relationship with team members and media, (e) demanding nature of work, and (f) more global problems related to life (e.g., studies, family). These aspects were framed as an inductive list of stressors experienced by mainstream Australian football players. In relation to the present dissertation, the NHL participants were Canadians and they relocate to Canadian and American cities to play for NHL team. Similarly, they were faced with stressors such as loneliness and lack of family support.
2.1.4 Stress in professional soccer

Sport researchers have also examined male and female professional soccer players competing in their respective World Cups. The World Cup was stressful since it was the largest sporting event in the world where athletes compete in sold-out stadiums containing 80,000 people and were watched by millions of people worldwide on television (Aldwin, 1994). Holt and Hogg (2002) identified the stressors experienced by the United States Women’s National Soccer Team before, during, and following the women’s World Cup. The sources of stress were: (a) negative content communicated by coaches, (b) athletic demands of international soccer, (c) competitive stressors such as anxiety, mistakes, mid-game insertion, fear of being de-selected and performance evaluations, and (d) distractions. One stressor that distinguishes the study by Holt and Hogg (2002) from others was the variation of responsibilities assigned to athletes and coaches based on their abilities and how there was a constant struggle to know these responsibilities and ensure that they were met. Soccer was a team sport similar to the sport of ice-hockey and athletes must meet their expectations and hope that teammates do the same which was an added stressor. Next, Salmela, Marques, Machado, and Durand-Bush (2006) examined the stressors experienced at the World Cup when they interviewed coaches from the 2006 Brazilian men’s soccer team. The coaches discussed the pressures of winning the entire tournament since the country has a rich history of winning the World Cup (i.e., 5 titles won). Within the present dissertation, approximately 50% of the players in the NHL were born in Canada. The large representation reflects the history of NHL teams recruiting Canadian hockey players. Indeed, little attention was given to process-oriented objectives or athletic development given the importance of the tournament and the relatively short time-line to prepare soccer players for optimal performance.
2.1.5 Stress in the National Hockey League

Presently, there are few sport researchers that have personally accessed members of the NHL. Hagy (2002) recognized this trend more than 10 years ago and found that most researchers study topics that necessitate a quantitative approach with publicly available data (e.g., points recorded by a player or team) because of the difficulties associated with accessing members of NHL teams. The difficulties include the need to establish organizational contacts willing to recruit players, building interest in the study, and negotiating scheduling conflicts that especially prevalent during the season. Many of these studies have been considered in Hagy’s overview of the literature pertaining to the topics of aggression (e.g., Frank & Gilovich, 1988; Vokey & Russell, 1992; Widmeyer & Birch, 1984), home-ice advantage (e.g., Benjafield, Liddel, & Benjafield, 1989; Wright & Voyeur, 1995), and physical development (e.g., Barnsley & Thompson, 1988). Outside of the study’s cited by Hagy, the existing literature about NHL players contains additional examples where quantitative data sets continue to receive the most attention including, again, aggression (Engelhardt, 1995; Grossman & Hines, 1996), the impact of mid-season transactions (White & McTeer, 1991) coaching changes (McTeer & White, 1995), attributional styles of NHL players (Davis & Zaichkowsky, 1998), and emotional intelligence in the NHL (Perlini & Halverson, 2006). Though the abovementioned studies provide some understanding of the NHL and its players, insight into the stress experienced and attempts at managing it have been less pervasive and a qualitative methodology would serve as the ideal approach to elicit these first-hand experiences.

Despite the limited access to NHL players, there are instances where sport researchers have published their own anecdotal experiences (i.e., Botterill, 1990, 2004; Halliwell, 1990, 2004) and examples where qualitative investigations about NHL players have been undertaken
(i.e., Battochio, Schinke, Battochio, Eys, Halliwell, & Tenenbaum, 2009; Hagy, 2002; Schinke, Gauthier, Dubuc, & Crowder, 2007). Botterill (1990, 2004) and Halliwell (1990, 2004), two mental training consultants, commented on their experiences with stress in the NHL on two separate occasions. Earlier, Botterill (1990) revealed the mental training strategies attempted by NHL players and, more importantly for the present dissertation, the stressors that provoked these attempts. The author noted three instances where players felt stressed (e.g., training camp, first NHL games, and playoffs) and compelled to seek his assistance. In his second report, Botterill (2004) explained that his priority as a consultant was to improve the psychological skills (i.e., installing team objectives and developing relevant mental training skills) of each NHL player leading to the reduction of stress placed on his clients. As a result, he ensured that the players were committed to the team’s goals, knew their roles, and were able to bounce back from a poor performance. Meanwhile, Halliwell (1990) offered another account of the mental training strategies to buffer against stress (e.g., confidence, distraction control, team and family support), utilized by NHL players when he discussed his experiences as a consultant for six years with a number of NHL teams. The demands experienced by NHL players included maintaining confidence and trusting team members, being selected to the team in training camp, and managing mental and physical fatigue caused by the arduous lifestyle (i.e., lengthy road trips, numerous games, and intense pressure to perform). In his second report, Halliwell (2004) described the challenges (e.g., opponents, referees, expectations, and extensive travelling schedule) associated with participating in the Stanley Cup playoffs. Though these reports provide information concerning the NHL context and the mental training strategies employed, they contained information regarding the periods of an NHL player’s career where they seek a mental training resource. Within the present dissertation, these seemingly sensitive periods will be
targeted in terms of conversational pieces with the participants. Despite the contribution, the findings reflected the authors’ interpretations rather than the viewpoints of NHL players. The present dissertation includes the first-hand views of NHL players.

Hagy (2002) was the first researcher to provide a first-hand account when he used one-on-one semi-structured interviews with three retired NHL players to learn about their experiences in amateur and professional hockey. The findings included three themes that could be categorized as contextual challenges: (a) relocating as a result of being promoted, (b) maintaining superior physical conditioning, and (c) preventing demotion. Nevertheless, the purpose was to learn about the retired players’ experiences in the NHL as opposed to determining whether the player experienced any specific challenges. Also worth considering, the challenges encountered by retired respondents may not hold true with NHL players across career stages (i.e., prospects, rookies, and veterans). Within the present dissertation, the views of active players were centralized with those of retired players used to corroborate the findings unless retirees experienced a unique stressor that active players have yet to experience (e.g., captain).

Schinke, Gauthier, Dubuc, and Crowder (2007) analyzed the words of rookie and veteran NHL players in major Canadian newspapers to identify and describe the adaptation process relevant to each group. Adaptation was framed as a stress response in relation to the athletes’ NHL careers. The authors also considered the NHL players’ cultural background (i.e., Canadian mainstream, Canadian Aboriginal, and European) in relation to the adaptation strategies selected. The adaptation strategies uncovered were the professional hockey players’ attempts to adjust to one of four adaptation challenges: (a) obtaining and maintaining a roster spot, (b) relocating as a result of a transaction, (c) understanding one’s role on the team, and (d) cross-cultural encounters. In essence, the authors provided empirical evidence of the challenging careers of
NHL players. Despite their contribution, Schinke et al. noted that they employed a second hand data source (i.e., archival data) and that future attempts ought to utilize first hand data (i.e., a semi-structured interview) that allowed researchers to pose additional questions that led to a greater understanding of the NHL players’ experiences.

As a direct response to Schinke et al.’s (2007) limitation, Battochio, Schinke, Battochio, Eys, Halliwell, and Tenenbaum (2009) conducted one-on-one semi-structured interviews with 11 NHL players during four career stages: 3 prospects, 3 rookies, 2 veterans, and 3 retired players. In terms of stress episodes, the participants discussed two challenges: (a) how they reached the NHL and (b) how they avoided de-selection. First, reaching the NHL and capturing a roster spot on an NHL team was achieved when players managed consecutive stressors including: scouting demands, training camp, increased athletic demands, team expectations, and earning team trust. Second, players avoiding de-selection (i.e., veterans) explained that many of the stressors associated with reaching the NHL were present in addition to dealing with the NHL lifestyle and media demands, relocating as a result of a transaction, managing cross-cultural encounters, and competing in the playoffs. However, the lines of questions during the structured interview were used to learn about the experiences of the NHL participants without specifically targeting information about stress episodes. Instead, an interview guide that begins with a question about the stress episodes experienced at each stage of their careers and then contains probes about managing the episodes.

2.1.6 Stressors organized

During major sport challenges, elite athletes encounter an array of stressors. To date, few sport researchers have organized these stressors in a meaningful way outside of noting the sport challenge during which they occurred (i.e., source). Woodman and Hardy (2001) were the first to
consider the contextual origin of an athlete’s stressor when they noted numerous stressors originating from their sport organization (e.g., coach). Sixteen current and retired elite athletes were given structured individual interviews that were later subjected to a hierarchal content analysis. The resulting stressors could be traced back to the organization and comprised of four issues: environment, personal, leadership, and team. The environmental issues were selection, finances, and training environment, accommodation, travel, and competition environment. The personal issues were nutrition, injury, as well as goals and expectations. The leadership issues were coaches and coaching styles while the finally set of issues originated from team members and included the team atmosphere, support network, roles, and communication. In relation to the present dissertation, it is plausible that each of these sources contribute to a player’s stress. However, the possibility also exists to organize stressors according to a time in an athlete’s career and the findings in the present study will be an attempt to associate stressors and their source with a career stage. Having stressors organized according to a career stage will allow athletes and their support staff to anticipate upcoming stressors and position themselves accordingly to ensure an adaptive transition.

Fletcher and Hanton (2003) realized that organizations constantly placed stress on elite athletes when they examined organizations within various sport disciplines. The authors held structured individual interviews with 14 elite athletes and then conducted inductive and deductive content analysis. Consequently, Woodman and Hardy’s (2001) issues were expanded upon with sub-themes. Environmental issues were selection, finances, training environment, accommodation, travel, and competitive environment. Personal issues were nutrition, injury, goals and expectations. Leadership issues were coaches and their coaching styles while team issues were atmosphere, support networks, roles, and communication. Generating sub-themes
provides a second level of richness within the discussion about stress. In the present dissertation, the stressors experienced by NHL players in terms of breadth and depth were sought. For example, stress could be experienced at any time in a player’s career and at one time, a combination of sub-stressors could leave a player feeling overwhelmed.

The topics of stressors and sub-stressors were later supported by Hanton, Fletcher, and Coughlin’s (2005) investigation with 10 elite international athletes. A semi-structured format was used to interview their participants individually before using a combination of inductive and deductive content analysis. As a result, the authors signalled that outside of organizational stressors, there were also stressors originating from competition such as preparation and opponents. Distinguishing these two sources of stressors was deemed imperative since unique and corresponding intervention programs were believed to be necessary in managing each group of stressors (Hanton, Fletcher, & Coughlin, 2005). Organizational stress was defined by Hanton et al. as “the environmental demands associated primarily and directly with the organization within which [the athlete] was operating” (p. 1130). Competitive stress was defined by Hanton et al. as “the environmental demands associated primarily and directly with competitive performance” (p. 1130). Essentially, the response used to restore equilibrium in a high-stakes sport challenge was determined by the athlete’s appraisal of the stressor in-context.

Organizational stressors were factors intrinsic to the sport, the organizational structure the athlete was part of, the athlete’s role in the sport organization, and athletic development issues (e.g., politics). Competitive stressors include the athlete’s opponent or the degree of challenge posed by the competition itself. For example, Hanton, Fletcher, and Coughlin identified six competitive stressors following interviews with 10 elite international athletes: (a) inadequate preparation, (b) high risk of injury, (c) pressure, (d) high quality opponents, (e) appearance, (f) event, and (g)
superstition. In relation to the present dissertation, NHL players experienced stress from the organization and the competitive contexts. What remains to be seen is the delineation of precise details that make, for example, an opponent stressful.

Thelwell, Weston, and Greenlees (2007) gathered empirical evidence exclusively about competitive stressors in professional sport when they interviewed one group of athletes about one role on their team: professional cricket batsmen. They found that the competitive stressors of batsmen were numerous: (a) perceptions of stress, (b) match specific issues, (c) current playing status, (d) relationships with important others, (e) external influences, (f) views of others, (g) opponents, and (h) technique. Perceptions of stress included sub-themes such as self-induced pressure, emotional instability, and insecurity while match specific issues were game challenge worries, importance of game, conditions of play, umpires for the game, and teammates’ performance. The stress associated with one’s current playing status was characterized by recent performances and selection issues while relationships with important others included communication issues, perceived negative influence of relationship, and expectation from others causing harm. External influences include different sub-themes such as reputation of club, contractual issues, personal life, financial pressures, and demands of the game. The stress originating from the views of other people included the views of the press, the public (i.e., community), and selectors (i.e., team) while the opponents were stressful when they possessed knowledge and expressed behaviours of a high standard. In all, Thelwell and colleagues provided a comprehensive list of the competitive stressors associated with being a professional batsman in the sport of cricket. The list of stressors can be closely examined in relation to the present dissertation about NHL players to find similarities and discrepancies since both groups of participants were professional athletes. For example, issues related to a teammate’s performance
in cricket were similar to ice-hockey were players constantly depend on each other during games. Mackay, Niven, Lavalle, and White (2008) interviewed 12 elite track athletes from the United Kingdom and identified 9 competitive stressors: (a) lack of confidence, (b) concerns about competitors, competition, and preparation, (c) fear of failure, (d) somatic concerns, (e) injury, (f) social evaluation and self-presentation during performance, (g) lack of social support at competition, (h) underperforming, and (i) pressure to perform. The authors also identified five organizational stressors: (a) training issues such as underperformance and lack of support, (b) negative interpersonal relationships, (c) governing body issues such as funding, selection, scheduling, doping assessments, (d) weather, lane, and race conditions, and (e) personal issues related to organization such as lifestyle demands and financial commitments. Mackay et al. also indicated that there was an additional category of stress: personal stressors. Personal stressors were stressors that originated from one’s life outside of athletics including the death of a loved one or family conflict. Despite the abundance of stressors delineated by sport researchers, there was a way of organizing them where the source (i.e., sport organization, competition, and personal) of the stressor was identified. However, the potential exists to organize elite athletes’ stressors into another category such as stress episodes that were presumably part of an athletic career. When stress episodes regularly occur at a time in an athlete’s career, she/he can anticipate its occurrence in her/his sport life. When the stress episode is anticipated, there is less uncertainty regarding its resolution since she/he can review potentially adaptive responses and select the appropriate course of action knowing that the episode will be acute instead of chronic.

2.1.7 Stress episodes and career transitions

Sport researchers have considered stressors in relation to a given time in an athlete’s career. The cumulative effect can destabilize athletes and necessitate attempts at adaptation. Stambulova
(1994) interviewed Russian athletes across sport domains and aside from listing the stressors of the participants; she was able to situate the stressors within a given time in their careers (i.e., advancement into professional rank). At the professional sport rank, the Russian athletes needed to: (a) negotiate equally skilled opponents, (b) deliver appealing performances for spectators, and (c) train independently despite being accustomed to direct tutelage from previous coaches. These stressors had the potential to prevent athletes from starting their career in professional sport. In the NHL, a plausible case can be made that rookies will experience similar stressors, which will be entirely different from those experienced later in one’s career such as a veteran.

Noblet and Gifford (2002) extended the literature by identifying the career transition stress possible in one professional sport. The authors held semi-structured interviews with 8 mainstream Australian Football League players and recruited 24 additional players to participate in one of four focus-group meetings before inductively grouping their stressors into six themes: (a) poor communication and low participation in decision-making, (b) poor form or difficult expectations, (c) career development concerns, (d) negative interpersonal relationships with team members and media, (e) demanding nature of work, and (f) problems related to life (e.g., studies, family). The results lend support for the notion that professional athletes experience stress at various times throughout their careers. In a second in-depth study about career stress in one professional sport, Nicholls, Holt, Polman, and Bloomfield (2006) learned about the stressors experienced by 20 professional rugby union players in the United Kingdom. The authors collected diaries comprised of a predetermined checklist of stressors (e.g., injury, error, off field stress, letting family down) that were confirmed by the participants though injuries and team selection generated the highest amount of stress. Furthermore, Nicholls and colleagues generated evidence supporting the notion that athletic careers rarely travel in a forward motion (i.e., career
 Instead, there was career mobility where professional athletes might belong to a club and get cut only to return later in the season. In relation to the present dissertation, there is evidence supporting the existence of career advancement as an objective that is accompanied by stress. Equally stressful is being an injured player in the NHL and hoping to return to the sport.

In relation to the present dissertation, there is evidence supporting the existence of career advancement as an objective that is accompanied by stress. Equally stressful is being an injured player in the NHL and hoping to return to the sport. The possibility also exists to view instances where career advancement was being withheld due to an incurred injury or a prolonged recovery given the prevalence of injuries in hockey.

Sport researchers began to notice a trend in professional sport. That is, stressors seemed to be grouped according to a transition period within an athlete’s career and failure to develop could stall career advancement (Stambulova, Alfermann, Statler, & Côté, 2009). The authors explained that career transitions are predictable and unpredictable (termed normative and non-normative) stages in which a coping process or adaptation strategies are key factors in a successful transition. In terms of support networks, Alfermann and Stambulova (2007) mentioned earlier that organizational support was at peak levels for professional athletes. In a recent study, Schinke, Bonhomme, McGannon, and Cummings (2012) sought to contextualise one aspect of the career transition models (i.e., adaptive and maladaptive strategies). Specifically, the authors sought to explore the adaptation and maladaptation strategies of the original six professional boxers participating in the ShowTime Super Six Boxing Classic. The ShowTime event was a televised tournament where interviews were used as media data and subjected to a thematic analysis. Rather than illicit only strategies, the results included multiple aspects of career transition models including: pre-conditions, outcomes, and consequences. The strategies and sub-strategies were situated within three timeframes: pre-tournament (i.e., positive anticipation, uncertainty), during tournament (i.e., progression, regression), and post-tournament (i.e., responses of defeated, and king’s adaptation). Most importantly for the present dissertation,
the findings revealed that two professional athletes could view the same bout quite differently and employ strategies that are equally unique. The consequences of each strategy could be adaptation or maladaptation.

**2.2 Adaptation**

Adaptation in sport pertains to the restoration of an elite athlete’s emotional and psychological balance through strategies employed to overcome the stressors associated with a stressful sport experience (Schinke, Tenenbaum, Lidor, & Battochio, 2010). Stressful sport experiences such as relocation or promotion were filled with stressors that can potentially de-stabilize athletes if their resources were insufficient (Jones & Tenenbaum, 2009). In professional sport, restoring a sense of psychological stability (i.e., adaptation) immediately following the onset of a stressful experience / circumstance can lead to continued effective performance and eventually, an increased salary, a lengthier term of contract, social benefits, better pension, endorsements, awards, and recognition (Battochio, Schinke, Battochio, Eys, Halliwell, & Tenenbaum, 2009). However, adaptation is not a novel concept either, with its literature traced back to researchers in psychology, starting more than 50 years ago. In elite sport, there has been a recent surge of interest about adaptation and the process that facilitates its outcome. The present section is devoted to these contributions starting from the earliest work done by psychologists to those carried out more recently by sport researchers.

Helson (1964) defined adaptation as “adjustments to environing conditions” (p.38). From this definition, adaptation was viewed as a response with the conditions (i.e., stressors) in the environment responsible for its onset. Helson (1964) added that outside of psychological responses, physiological and biological responses could be used to restore a sense of equilibrium within an individual overwhelmed by stressful conditions. Restoring one’s balance is relevant to
elite athletes such as NHL players since they are constantly being challenged by chronic (e.g.,
team expectations) and acute (e.g., media demands) stressors that, combined, could elicit
maladaptive behaviours that decrease performance. The identification of adaptive behavioural
responses was considered subsequently when Taylor (1983) introduced the theory of cognitive
adaptation. Taylor examined the strategies employed by victims of criminal activity, cardiac
patients, and cancer sufferers that were hoping to overcome their respective personal tragedies.
Personal tragedies oftentimes de-stabilize people, because in addition to daily chronic stressors
related to work, family, and friends, they must overcome a stressful episode such as cancer or
heart disease. Though failings in one’s personal health are serious, the search for a roster spot in
professional sport can be associated with stress. As part of an adaptive response, Taylor
highlighted three cognitive strategies: meaning, mastery, and self-enhancement. Meaning was
described as an effort to understand one’s challenge by making causal attributions regarding the
tragedy’s onset. Mastery focused on gaining a greater sense of control within the tragic challenge
thus affirming that adaptation can be achieved. Meaning and mastery were thought to be
intertwined since once an individual understands the cause(s), attempts were made through self-
managing or managing the environment to gain a sense of control over the tragedy. Self-
enhancement referred to efforts geared towards improving oneself or preserving one’s self-
estee. When experiencing a tragedy, an individual’s self-esteem diminishes even if the tragedy
can be attributed to external causes. Thus, individuals were motivated to understand the tragedy
and take measures to regain a sense of control. Self-enhancement also includes attempts at self-
promotion which was characterized by comparisons between oneself and others facing similar
tragedies. Successful individuals emphasize their strengths such as knowledge or skill and
believe these were the reasons why they have managed the tragedy better than others. In all,
Taylor’s (1983) cognitive strategies were used as pathways to overcoming personal tragedies. In other contexts such as professional sport, overcoming demands was paramount to achieving success (e.g., higher salary, endorsement) and there was reason to believe that Taylor’s pathways might help people achieve success in these contexts. Following the theory’s inception, researchers gathered empirical evidence of its application with patients diagnosed with mental health issues (Taylor & Brown, 1988), physical health problems (Taylor, Kenemy, Reed, Bower, & Gruenewald, 2000), and cancer (Taylor, Lichtman, & Wood, 1984).

While Taylor and colleagues continued their work about adaptation processes, additional theoretical contributions to adaptation were made in relation to three stressful life challenges: (a) cross-cultural encounters, (b) academic success, and (c) advancement at work. First, cross-cultural encounters and potential adaptation outcomes, termed acculturation, have been examined by Berry (1997) who defined adaptation as the “changes that take place in individuals or groups in response to environmental demands” (p.13). Berry identified four modes of acculturation: (a) integration, (b) assimilation, (c) separation, and (d) marginalization. Integration refers to maintaining one’s cultural identity while also adopting some of the values and customs of the new culture. Assimilation refers to denying one’s own cultural identity in favour of adopting the new culture’s values and customs. Separation refers to rejecting the new cultural values and customs and maintaining one’s original cultural identity. Marginalization refers to dismissing the cultural values and customs of both the old and new culture. It can be proposed that successful adaptation was most likely related to Berry’s acculturation outcome of integration since people (including those in achievement contexts) must develop strong mental health and positive relations to effectively function in their old and new cultural environments.
Generally, Berry’s work has focused on adjustments made to manage relocation challenges; particularly the experiences of immigrants leaving their host country and settling in another country with new values and customs. In an achievement context such as professional sport, athletes relocate to pursue sport opportunities in new countries (Schinke et al., 2007). Therefore, Berry’s framework of adaptation was somewhat applicable for discussing relocation challenges, especially since relocating in the NHL is a frequent endeavour.

Outside of Berry’s framework, there have been other developments including the identification of two types of adaptation: psychological and sociocultural (Berry & Ward, 2006; Ward & Kennedy, 1999). Psychological adaptation refers to an individual achieving positive mental health while sociocultural adaptation relates to positive relations existing between individuals and others (e.g., family, work, school). Moreover, Berry (2003) articulated that adaptation could also occur through the modification of one’s environment when he stated: “it was thus not a term that necessarily implies that individuals or groups change to become more like their environments (i.e., adjustment), but may involve resistance and attempts to change their environments” (p.20). To date, the majority of research has been focused on adaptation being achieved following the adjustments of an individual’s thoughts and behaviours yet, according to Berry (2003) adaptation can also be achieved through social support in the individual’s environment. The work completed by Berry and his colleagues have implications for the present dissertation, particularly the third research question. The question is about identifying how others (e.g., coaches, teammates) aided the NHL participants overcome stress episodes which is, in essence, an attempt at understanding how the environment facilitate adaptation.

Stevens and Fiske (1995) believed that fitting in harmoniously within a group was another context suited to the discussion of adaptation. People rely on others to provide support or
mediate between the individual and the environment (Pittman & Zeigler, 2007). Without stable relationships, people are left to use their knowledge and skill sets, which might be limited, to overcome the demands within a stress episode. Consequently, Fiske (2004) refined Taylor’s (1983) theory and included interpersonal adaptation strategies as part of a revised adaptation framework. Fiske identified five pathways that contribute to adaptation: (a) understanding, (b) controlling, (c) self-enhancement, (d) belonging, and (e) trusting. When considering Fiske’s framework, similarities emerged supporting Taylor’s (1983) theory of cognitive adaptation despite the differences in terminology. Meaning and mastery were termed understanding and controlling respectively while self-enhancement remained intact. Understanding encourages people to make sense of their environment so that they may be able to better predict what was going to happen. Building knowledge was believed to help people make sounder decisions, leading to adaptation, even in highly emotional and/or uncertain moments (Wilson & Gilbert, 2008). Controlling encourages people to perceive themselves as effective in dealing with personal and environmental issues. Self-enhancement involves garnering the requisite skills that lead to self-improvement or at least maintain self-esteem. As mentioned earlier, Fiske (2004) believed that people rarely work in isolation and added two socially oriented core motives to her framework: belonging and trusting. Belonging is the idea that people need to build dependable relationships with others because it helps them fit better into a group, fostering a sense of interpersonal ease required in achievement contexts. Meanwhile, trusting involves confidence or faith that another will help us avoid or manage challenging stressors. Fiske stated that combined “all five motives were oriented toward making people fit better into groups, thus increasing their chances of survival” (p.15). Survival within the context of the NHL refers to maintaining one’s roster spot on an NHL team immediately following a call-up from the minor leagues.
2.2.1 A-theoretical research about adaptation

Sport psychology researchers have examined processes related to the outcome of adaptation since 2003 and have employed an inductive (i.e., a-theoretical) approach, sometimes in combination with a deductive approach. There were two advantages to conducting research that was absent of a priori theory. First, researchers form themes that serve as a reflection of the data from which it can be derived and second, they do not seek solely to demonstrate whether data supports a particular theory. Instead, they seek to understand adaptation processes and outcomes that are shaped by the sport population and context (e.g., Canadian Aboriginal athletes) under investigation. In the latter study, an inductive approach was used to prevent any influence from mainstream researchers and ensure an authentic re-presentation of the Aboriginal athletes’ experiences. Specifically, the studies presenting adaptation without a theoretical backdrop are: (a) Tenenbaum, Jones Kitsantas, Sacks, and Berwick (2003b), (b) Schinke et al. (2006), and (c) Campbell and Sonn (2009).

The first exploration into athlete adaptation known to this author was undertaken by Tenenbaum, Jones, Kitsantas, Sacks, and Berwick (2003b). The authors categorized the responses of cyclists into successful adaptation or failed adaptation. The authors highlighted two participants among their sample group who felt overwhelmed by the number and quality of stressors in their sporting and personal lives and how their responses led to failed adaptation. The first cyclist struggled to effectively commit to being an elite athlete and maintaining full-time employment. The second cyclist struggled with the demands related to immigrating, training and competition, as well as raising a family. Failed adaptation was manifested through the following symptoms: (a) high tension, (b) low vigour, (c) fatigue, (d) helplessness, (e) rigidity, and (f) avoidance behaviour. The remaining participants employed far more constructive responses,
contributing to their successful adaptation. Successful adaptation was characterized by (a) low state anxiety, (b) vigor, (c) clarity of thought, (d) hope, (e) flexible approach toward context, and (f) presence of social support. Schinke and colleagues (2007) showed how each of the adaptive responses link with Fiske’s adaptation pathways as experienced by NHL players. For example, Tenenbaum and colleagues’ flexible approach and low levels of state anxiety corresponded with Fiske’s pathways of understanding and controlling respectively. Meanwhile, vigor, clarity of thought, and hope were adaptive responses that could be linked to the pathway of self-enhancement. Finally, the presence of social support in Tenenbaum et al. affirms a need to build positive relationships, resembling Fiske’s pathway of belonging. Aside from providing the first inductive attempt to examine adaptation known to this author, Tenenbaum et al. were among the first to examine adaptation processes and outcomes (i.e., successful and failure adaptation) in sport. In the present dissertation, NHL participants spoke about the processes undergone with hopes of alleviating stress in the NHL. The processes highlighted might not have led to the desired outcome and instead, maladaptive processes were fore fronted for the first time by professional athletes.

The more recent a-theoretical study was an attempt to consider the adaptation process of elite athletes from a marginalized culture: Canadian Aboriginals. Schinke et al. (2006) believed that Canadian Aboriginal athletes presented a history of marginalization and would yield experiences that were unique only to the population. Thus, a research method that respected the uniqueness of the Aboriginal athletes and minimized the influence of mainstream researchers was employed. The method was comprised of an unstructured individual interview and an inductive content analysis, which were conceptualized to authentically capture the experiences of the elite Aboriginal athletes. The participants were interviewed to learn how they were de-
stabilized by stressors (e.g., cultural nuances) associated with the stress episodes of training and competing in a multi-cultural setting as well as relocating from their smaller cultural communities to a large urban city. Examples of cultural nuances included being subjected to stereotypes from non-Aboriginals or receiving little support for using traditional Aboriginal preparation strategies (e.g., smudging). Meanwhile, relocation was taxing since the participants sometimes relocated from rural (i.e., reservation) to urban areas, which were unknown environments with culturally unfamiliar expectations from teammates and coaches. The participants psychologically stabilized themselves with two adaptation strategies: (1) self-adaptation and (2) an adapted environment. Self-adaptation included: (a) learning about the structure, (b) self-managing, (c) resisting the environment, (d) committing and being persistent, and (e) gaining acceptance. Despite the authors’ a-theoretical approach, each theme could be associated with one of Fiske’s five pathways. The self-adaptation theme of learning about the structure was linked to the pathway of understanding while self-managing and resisting the environment were controlling strategies. The theme of committing led to self-enhancement while the theme of gaining acceptance from team members resembled the pathways of belonging and trusting. Meanwhile, adapted environment was comprised of two adaptation strategies: teammate support and building relationships, with both strategies occurring with the assistance of coaches and sport psychologists. Previously, the category of adapted environment was introduced as part of Berry’s (1997) framework, yet Schinke et al. (2006) were the first sport researchers to indicate that coaches and teammates could facilitate adaptation. In the present dissertation, attempts were be made to uncover not only individual adaptation strategies but also how coaches, teammates and others can facilitate the outcome of adaptation during each stress episode. Though the present dissertation included white-mainstream males from one professional sport, the notion of
seeking to adapt through individual means or support networks as a resource can be derived from Schinke et al.’s work.

In a third study, Campbell and Sonn (2009) conducted structured individual interviews with professional Aborigine football players in the Australian Football League (AFL). The authors learned about the stress of relocating and settling into an AFL club in addition to the corresponding challenges which were: isolation, lack of family support, racial abuse, inadequate financial management, the need to promote education and training, attention to issues of numeracy and literacy as well as relocation. To achieve a sense of ease in these stress episodes, social support mechanisms were identified. The mechanisms were family members, mentors, and kindredness. Family members facilitated adaptation when they were supportive despite the challenges encountered. Mentors were viewed as primary facilitators of adaptation especially when Aborigine footballers arrived onto a new team and had someone (e.g., coach, teammate, sport psychologist) that shared their cultural identity to help them overcome most challenges. Finally, kindredness (i.e., team member) was viewed as a facilitator since Aborigine athletes focused on winning were better able to fit into the team than those who chose not to. Campbell and Sonn found that social mechanisms were effective facilitators of adaptation and perhaps, their findings provide an indication of the mechanisms (i.e., people) that facilitate adaptation in the NHL. For example, coaches, teammates, and family members have been listed as viable sources of support and the contributions of said sources were considered in the careers of the NHL participants.

2.2.2 Theoretical research about adaptation

There were also recent studies in sport where adaptation has been examined in relation to Fiske’s (2004) five pathways. The data analysis of the three forthcoming studies was comprised of two
separate stages. First, a deductive analysis was completed with data categorized in accordance with Fiske’s pathways and then within-pathway sub-themes were developed during a secondary stage known as an inductive analysis. The present section about theoretical studies includes three research projects where scholars have applied a combination of deductive and inductive approaches. Two of these projects are about NHL players and one pertains to Canadian Olympians.

Schinke, Gauthier, Dubuc, and Crowder (2007) as well as Battochio, Schinke, Battochio, Halliwell, and Tenenbaum (2010) employed Fiske’s (2004) pathways as a theoretical framework to identify how professional ice-hockey players sought and sustained a career in the National Hockey League (NHL). In the earlier study by Schinke et al. (2007), the data set included citations from NHL players found in major Canadian newspaper articles (e.g., Globe and Mail, Toronto Sun), which were analyzed according to Fiske’s five adaptation pathways. Newspaper articles were viewed as an appropriate data source since professional athletes were considered to be a sport population that was difficult for researchers to access (Hagy, 2002). The study included citations from NHL players in different stages of their careers (i.e., rookie and veteran) and cultural backgrounds (i.e., Canadian mainstream, Canadian Aboriginal, and European).

Schinke et al. (2007) offered an initial understanding of the adaptation strategies and sub-strategies employed by NHL players during stress episodes. Regardless of their experience, Canadian mainstream NHL players indicated that understanding the overall structure of their team enabled them to effectively identify and adopt a role on the team. The pathway of controlling was evidenced by two within-pathway sub-strategies of confidence and assertiveness. Self-enhancement occurred following the sub-strategies of hard work and continuous learning. The authors also indicated that fitting into the team and receiving support from their teammates,
the community (both previous and new), and from their families were important sub-strategies in the pathway of belonging. Finally, the trusting relationships with coaches and teammates ensured that Canadian mainstream NHL players did not have to manage all stressors experienced. A limitation duly noted about archival (i.e., second-hand) data was that the researchers had no control over the questions being asked and an investigation using individual interviews (i.e., first-hand data) would provide researchers with the opportunity to seek out further description, elaboration or clarification of any ambiguous responses from the participants (Patton, 2002). That said it was worth noting that despite inconsistent questions and interviewers, consistent responses were generated lending support for a consolidated adaptation process among NHL players. Questions remain about the processes employed to overcome specific stressors and whether some processes were successful or unsuccessful at mitigating stress in the NHL. There is also an interest in the temporal nature of experiencing stress, attempting to resolve it or having others intervene, and whether the attempts reduced stress according to each NHL participant.

In the study by Battochio et al. (2010), the authors conducted individual interviews with 11 NHL players categorized into four different career stages: 3 prospects, 3 rookies, 2 veterans, and 3 retirees. An expert panel (i.e., people with NHL experience) was organized to ensure that the semi-structured interview guide, data analysis, and findings generated would lead to an authentic representation of the experiences of NHL players. The findings contained information about how Canadian NHL players at different career stages (e.g., rookies and veterans) managed the challenges they experienced. The results were that NHL players responded by employing specific adaptation strategies, and within, sub-strategies that were situated in one of Fiske’s five pathways. NHL players employed the pathway of understanding when they needed to understand their role within the team structure. Their roles were associated with specific expectations that
corresponded with their individual abilities (i.e., self-awareness). As NHL rookies, one’s abilities could limit the amount of expectations associated with their role compared to NHL veterans. The pathway of controlling was expressed when the NHL players spoke about being confident in their abilities and consistently asserting themselves to build or maintain their confidence and manage distractions. NHL rookies expressed a need to develop confidence by finding effective ways to assert themselves and manage distractions while veterans possessed the necessary control strategies. The pathway of self-enhancement was evident when NHL players explained how they improved through an incessant work ethic and open-approach to learning. Rookies and veterans expressed a need to continuously improve their abilities however NHL rookies emphasized self-improvement with hopes of obtaining a roster spot. The belonging pathway related to when others (i.e., family and team members) were readily available to be supportive or a resource for the NHL players. NHL veterans added that family members included significant others and children as well as parents. Lastly, the pathway of trusting was evident when mainstream NHL rookies and veterans depended on teammates, coaches, and agents to overcome various NHL stressors.

Dividing the two aforementioned NHL reports in terms of time was an attempt by sport researchers to contextualize Fiske’s pathways with one group of elite amateur athletes: Canadian Olympians. Schinke, Battochio, Dubuc, Swords, Apolloni, and Tenenbaum (2008) examined archival data (i.e., newspaper articles) to understand the adaptation process of Canadian Olympians preparing for and competing in the summer (i.e., Sydney, Australia and Athens, Greece) and winter (i.e., Salt Lake City, U.S.A and Turin, Italy) Olympic Games. The Olympic Games are considered the pinnacle of amateur sport (see Botterill, 1996, 2005; Orlick & Partington, 1988) and this stress episode contains several stressors in and outside of competition.
Within competition, Olympic athletes are faced with competing against others that most likely possess superior athletic abilities. Meanwhile, the stressors experienced outside of competition include heightened media attention, increased safety measures, unfamiliar mission staff, and variable weather conditions among others. Consequently, Canadian Olympians employed a number of adaptation pathway strategies that were akin to Fiske’s five pathways and pathway sub-strategies that can be organized according to gender, level of experience (i.e., promotion or retention), and sport season (i.e., Winter or Summer). Understanding was mainly comprised of three sub-strategies regardless of gender, experience, and sport season: environment, opponent, and expectations. The single exception was that athletes returning to the Olympics for at least a second time emphasized understanding the team structure. Controlling was characterized by four sub-strategies (i.e., confidence, assertiveness, distraction control, and preparation) and did not differ according to gender, experience, or season. Self-enhancement was equally similar across groups with effort and learning as the pathway sub-strategies though athletes appearing at the Games for the first time indicated that they learned new information about the Olympics. Within belonging, the Olympians identified the support from family members (i.e., parents) as an integral part of their development throughout their formative years. Some athletes, especially those retaining their Olympic status, emphasized the contributions of a significant other. National team members (including sport psychologists) were the second pathway sub-strategy identified within belonging. Olympians in each group developed relationships with team members to buffer against pressures to perform, shift the focus to social content periodically, and support athletes away from family members. Community support was the final sub-strategy for all Olympians within belonging and comprised of daily encouragement from fans, financial sponsorship, and media coverage. Lastly, the pathway of trusting coaches, sport psychologists, and teammates was
employed by all groups. Members of the support network were given responsibilities to fulfill so that Olympic athletes are free to concentrate on delivering performances worthy of the Olympic Games.

Recently, Battochio, Schinke, McGannon, Tenenbaum, Yukelson, and Crowder (2013) sought to extend the adaptation literature to determine the contributions of support networks within the sport context hoping to facilitate the adaptation process of immigrant professional athletes in the NHL and Major League Baseball (MLB). Four of Fiske’s (2004) five pathways were employed as a theoretical backdrop to discern the within-pathway strategies of coaches and teammates hoping to assist immigrated professional athletes on their team. Media data about 56 NHL and 56 MLB players that relocated to North America from the remaining continents was collected and analysed using a content analysis technique. The four pathways and within-pathway sub-strategies were: (a) understanding, which was comprised of language advice, language models, and integration advice, (b) control, which was comprised of language reinforcement and integration reinforcement, (c) belonging, which was made up of shared cultural background and cultural appreciation from one’s sport team, and (d) trusting, which was comprised of inclusive reputation of the team and of immigrated veterans. The sub-strategies give sport psychology researchers and practitioners a sense of the contributions made by coaches and teammates to facilitate adaptation. However, caution should be used to interpret the results given that media data was used. Within the present study, an attempt will be made to determine the viability of these contributions to facilitate relocation adaptation.

From the Olympic and NHL findings, similarities and discrepancies can be established despite the differences in sport population and demands experienced. With regard to similarities, Canadian Olympians and NHL players re-established a sense of ease by understanding the
expectations associated with their role in the team structure. In the pathway of controlling, the NHL players and Canadian Olympians agreed that confidence and assertiveness were important pathway sub-strategies that led to feelings of control. Having a strong work ethic and an open approach to learning were viewed as self-enhancement sub-strategies. Meanwhile, family and team members supported the athletes and ensured that belonging needs were met. As for the pathway of trust, each group noted that they did not work in isolation and that their success depended on coaches and teammates doing their jobs effectively. From the aforementioned studies employing Fiske’s five pathways, there was evidence that a coherent process of adaptation exists regardless of whether the sport population is elite amateur or professional athletes. The remaining pathway sub-strategies were potentially specific to athletes at the Olympic Games. Within the pathway of understanding, Canadian Olympians competing against an opponent (e.g., boxing) wanted to know about their opponents’ strengths and weaknesses so they could then apply the controlling pathway sub-strategy of preparation. Understanding an opponent and preparation enabled Olympians to avoid the opponents’ strengths and exploit their weaknesses. However, an examination into the adaptation process in the NHL might lead to examples of understanding within the NHL context.

2.3 Gaps in the literature

Despite the research conducted about adaptation, especially in recent years, four visible gaps remain in the literature. First, previous research about NHL players employed methodological approaches that generated initial understandings of specific content from the vantage of an outside: either a reporter or a sport psychologist. Essentially, sport researchers intentionally sought information through the use of archival and interview data to identify and describe challenges and adaptation strategies. These data collection formats did not permit the athletes to
direct the process of discussion and propose adaptation experiences most pertinent to them. Within the present study, unstructured individual interviews were held with NHL participants to afford them the opportunity to revisit stressful episodes in their careers and how they handled themselves. Second, researchers have yet to gain an in-depth understanding of stress episodes in the NHL, what makes an episode stressful, why each player wanted to effectively manage the episode. Precisely, adaptation is temporal as opposed to atemporal. There is a beginning – catalyst to each stress episode, and following, the athlete moves through an adaptation process that either resolves the stress or manifests in chronic challenge and mal-adaptation. The intent within the present study is to delineate the circumstances, networks, and decisions that lead in and out of a stress episode. Third, the participant groups selected during previous empirical investigations included professional ice-hockey players from the NHL. However, the participant number has never exceeded more than a total of 11 NHL players. Though the total allows for preliminary insight into the NHL, a larger number of participants (e.g., 23) can illuminate the various stress episodes experienced. In addition to a greater number of stress episodes, this augmentation in participant numbers would permit a deeper understanding into the varied stress episodes encountered by a reasonable number of participants. Initially it was hoped that the participant numbers would be balanced for rookies, veterans, and retirees. Unfortunately, this was not possible due to limited access by the researcher during the time of participant recruitment. As such, the focus in this project balances general results, and emergent themes are considered by career stage across the athletes, with the veterans and retirees providing rookie experiences as well as experiences derived once they were established veterans. Fourth, Battochio et al. were unable to provide any recommendations from the vantage of an NHL player about being promoted and avoiding de-selection. The present thesis is a second opportunity to
show the pathways taken by NHL players and their consequences, which aspiring NHL players can draw upon when competing in the NHL and coaches, mental performance consultants, agents, and family members can utilise to increase their viability as a career transition resource.

2.4 Research questions

1. What were the stress episodes encountered by athletes in the NHL?

2. In relation to each stress episode, what processes were being employed to seek the outcome of adaptation?

3. How might the athletes’ social support network help prospective or current NHL players navigate through their various stress episodes?

2.5 Chapter summary

Following a review of the literature about NHL players, stress, coping, and adaptation, there were four key points that support the research questions in the present dissertation. First, sport researchers have identified stressors in the NHL yet they must discern whether a stressor appears at a given time in a player’s career. In doing so, players and their support network can anticipate the stress they are likely to encounter and select a viable way to adapt. Moreover, empirical support for adaptation in the NHL has been generated under one limited theoretical framework. Fiske’s (2004) pathways are limited since only one is taken and the sequential order of dealing with stress. Instead, the pathways taken by the participants will be outlined regardless of whether they were repeated by multiple participants, unique to one participant, or led to a maladaptive outcome. As a result, the findings will include examples based on the experiences of each NHL participant and a sequential order whereby stressors are identified followed by strategies that were either adaptive or maladaptive. Second, previous studies about NHL players have been limited by the methodological approaches used by sport researchers. Recent attempts have been
made to use qualitative methodologies with second-hand data such as newspaper articles (e.g., Schinke, Battochio, Dubuc, Swords, Apolloni, & Tenenbaum, 2008; Schinke, Gauthier, Dubuc, & Crowder, 2007) and first-hand data (e.g., Battochio, Schinke, Battochio, Halliwell, & Tenenbaum, 2010) through individual interviews with hopes of generating a greater depth of knowledge about their careers in the NHL. However, newspaper articles have been limited since researchers have no control over the lines of questions used by journalists, preventing an in-depth exploration of stressors and its resolution. As for individual interviews, the lines of questions were used to learn about the stress experienced at the rookie and veteran career stages without any concern over stress experienced throughout an athlete’s career (e.g., sophomore jinx, injury). The intent in the present dissertation was to hold unstructured interviews with each participant to learn about the stress episode or series of episodes relevant to their careers. With unstructured interviews, the participants discussed the most salient episodes from the vantage of the athletes throughout their career and the adaptation strategies used to respond. Third, during previous studies with NHL players, scholars only recruited a maximum of three NHL participants according to the following career stages: rookies, veterans, and retirees. Thus, the findings in Hagy’s (2002) as well as Battochio, Schinke and colleagues’ (2009; 2010) investigations ought only to be regarded as catalysts to the current project. To generate a more comprehensive depiction, five rookies, five veterans, and 13 retired players were recruited as a convenient recruitment pool. Lastly, there is little information about the means by which teammates, coaches, sport psychologists or others have aided or prevented NHL participants from adapting to a stress episode. Consequently, the research questions were drafted with hopes of addressing the four aforementioned key points in the literature.
CHAPTER 3

3 Method

The method section within the present dissertation was comprised of five sections: (a) participants, (b) expert panel, (c) data collection, (d) inductive thematic analysis, and (e) validity. The five sections will then be interpreted to determine the ontological and epistemological positions of the present study.

3.1 Participants

The participants included 23 NHL players varying according to their level of experience (i.e., 5 rookies, 5 veterans, and 13 retired NHL players). In terms of experience, the participants were able to comment on their experiences as rookie and veteran NHL players. Rookie NHL players included players with at least one NHL game of experience so that their experiences entering the NHL could be elicited at least. Veteran NHL players were those that could no longer sign an entry-level rookie contract and they could speak towards most career experiences such as sophomores, rising stars, team leaders, and established veterans. The retired NHL participants were comprised of players that no longer occupy an NHL roster spot. Similar to the veterans, they provided information about most career experiences and served as a means to explain career stress episodes from the vantage of people with a completed full career in retrospect.

The participants included 5 rookies, 5 veterans, and 13 retired NHL players. The rookies were forwards that ranged between the ages of 21 and 26 years, with a mean of 22. They played between 2 and 93 regular season games in the NHL for an average of 64 games. As for the Stanley Cup playoffs, only two rookies participated for an average of 14 playoff games. As for the veterans, they were forwards that ranged between 24 and 39 years of age for an average of
29. They played between 221 and 1110 regular season games (M=485). In the playoffs, they played between 17 and 49 playoff games (M=31). As for the retired players, 9 were forwards and 4 were defensemen. They varied between the ages of 41 and 56 with an average age of 47 years. They played between 38 and 1055 regular seasons games (M=550) as well as 4 and 99 playoff games (M=25).

3.2 Expert panel

An expert panel was assembled to verify the analysis of the data and the interpretation of the findings. The inclusion of people with knowledge of the NHL context from the vantage of being an athlete was an attempt to offset the limited contextual knowledge possessed by the researcher. The NHL context and the athletes therein were being studied and when the researcher’s background was considered, there was little experience that enabled him to fully understand the context and provide an accurate depiction of stress episodes. The panel was comprised of a former NHL player with 14 years experience in the league and one previous academic publication, a family member of an NHL player with 6 years experience, and a coach of an NHL team. Three members ensured that disagreements could be resolved through a voting scheme whenever the panel members could not reach a consensus. The reason for selecting these members was to represent that vantage point of an NHL player while collecting the insights of two prominent resource networks (i.e., family and coaches). The researcher presented each stress episode, the corresponding stressors as well as the various pathways employed by the participants in table format along with exemplary quotes to reach the outcome of adaptation to the panel. The panel then provided feedback that confirmed or disconfirmed the findings in the inductive thematic analysis followed by insights supporting their conclusions. For example, the panel was unanimous in supporting NHL training camps and the Stanley Cup Playoffs as two
highly stressful episodes for all participants, regardless of their age and experience. The remaining stress episodes varied according to each player’s experience with the stress. Once all of the data was re-analyzed with the panel’s feedback in mind, a final presentation was done so that each panel member could reaffirm, modify, or reject their original feedback.

3.3 Data collection

Patton’s (2002) purposive convenience sampling method was used to recruit participants in the present dissertation. Many of the participants had a pre-existing relationship with the researcher or a family member, which enabled the recruitment of a historically hard-to-reach population. For the participants, allocating time to a research project about NHL players can also be a cause that benefits communities, organizations, athletes, and coaches. However, it must be acknowledged that there were potentially more meaningful ways (e.g., local, national, or international interviews, hockey schools) to ensure that their knowledge and experiences reached the masses that many participants already partake. In addition to the convenience sampling method, Patton’s snowball sampling approach was used. Following interviews with NHL players, questions about the availability of new participants were asked to recruit NHL players that could help meet the research objectives.

To learn about the experiences of NHL participants recruited for the present dissertation, individual interviews were conducted with current and retired NHL players. Previous research used the semi-structured interview format to learn about specific topics (e.g., challenges) pertaining to an NHL player’s career (see Battochio, Schinke et al., 2009; Hagy, 2002). In the present dissertation, a search for specific topics was done once again through the inclusion of an interview guide however, flexibility was needed to ensure that all stress episodes and associated stressors were uncovered. According to Patton (2002), utilizing an interview guide ensured that
basic lines of inquiry were pursued with each participant and allow for novel conversations to occur based on the participant’s experiences. The interview guide (see Appendix D) contains questions designed to help the participant identify their stress episodes associated with each stage of their career in the NHL. Additional information about stress episodes and the stressors experienced therein according to the present dissertation’s literature review were also included. Stress episodes include managerial attempts by elite athletes to appraise the stressor, identify a potential coping strategy, apply the strategy, and search for social support with hopes of eventually reaching the outcome of adaptation in relation to the episode. Among the questions in the guide were some designed to elicit the stress relevant to the participant being interviewed. From the literature, it is apparent that NHL players are not unanimous about the stress experienced in the NHL. For some players, moving to a new team and meeting unfamiliar teammates is stressful while others do not fret over their ability to build relationships with new teammates. Stress and adaptation can be a personal experience and so, questions were integrated within the interview guide to elicit the stress relevant to the interviewee. Of note, the interview guide also included probe questions designed to thicken the description of each stress episode, give cues to the participant about the level of response needed, and uncover any novel findings such as new episodes.

Patton indicated that four types of probes exist: (a) detailed-oriented, (b) elaboration, (c) clarification, and (d) contrast. Detailed-oriented probes were used to obtain additional information for a detailed understanding of an experience and involve the standard “who,” “what,” “where,” “when”, and “how” questions. Patton’s examples of such probes are: “when did that happen? Who else was involved? What was your involvement in that challenge” (p.373)? Elaboration probes were used when a participant was talking about an interesting topic
and the interviewer wants them to continue on the matter. Gentle and strategic head nods were considered to be the most effective way of encouraging the interviewee to continue speaking. Verbal communication (i.e., probes) can be used to enhance elaboration and examples include: “Would you elaborate on that? Could you say more about that? I am beginning to get the picture” (Patton, 2002, p.374). Clarification probes were used when a response was ambiguous and more information about perhaps the context was needed. Patton proposed that researchers need to be cautious when posing clarification questions so as to attribute the misunderstanding to themselves and not the interviewee. Attributing the ambiguity to the interviewee can make them feel inarticulate and unintelligent. Examples of clarification probes are: “You said that the program was a success. What do you mean by that?” and “I want to make sure I understand what you’re saying. I think it would help me if you could say more about that” (Patton, 2002, p.374). Finally, contrast probes were used to determine the boundaries of a response since participants were asked to compare two separate experiences. For example, a contrast probe was “how does x compare to y” (Patton, 2002, p.374).

3.4 Inductive thematic analysis

A thematic analysis is a form of analysis used to identify, analyse, and report patterns within a data set (Braun & Clarke, 2006). The authors recently differentiated the analysis from other analysis that could be considered a methodology or approach in addition to a research method such as a discourse analysis or grounded theory (Braun & Clarke, 2012). Instead, the authors explained that a thematic analysis is comprised of guidelines that qualitative researchers abide by in order to generate themes related to the research objective. They added that within a thematic analysis, there are two variations: inductive and deductive. An inductive thematic analysis involves the creation of themes that reflect the data that it represents. As for a deductive thematic
analysis, the themes originate from the extent literature and data that corresponds with existing themes is collected with new themes being developed in cases where themes are highly prevalent across the participants. The objective in the present study involves determining the stress episodes experienced by each NHL player. As such, an inductive thematic analysis was used to avoid neglecting any stress episodes and the player’s subsequent attempts to manage the stress. Braun and Clarke proposed six stages when structuring an inductive thematic analysis. Stage one involved familiarizing oneself with the data. In this case, the individual interviews were conducted by the same person and recorded by using two audio recorders and taking notes throughout. Also, the recorded data was then transcribed verbatim to conduct the remaining phases of the thematic analysis. The resulting transcripts were a word for word (i.e., accurate) written account of each interview and they were repeatedly read to reach an optimal level of immersion with regard to the breadth and depth of the stressful episodes and pathways discussed. In stage two, the familiarized data was provisionally coded meaning that each sentence or phrase from the participants was given a thematic label pertaining to stress (e.g., draft pressure), adaptation (e.g., control draft distraction), or maladaptation (e.g., obsess over draft). The third stage involved gathering and collating all provisional codes into stress episodes and the pathways taken by the athletes. Given the inductive nature of the analysis, a breadth of stressful episodes, adaptive and maladaptive pathways, and support network strategies were unearthed. The data also differed according to the participant’s level of experience. Also, each stress episode was housed within a career transition (i.e., overarching theme) depending on its occurrence in a player’s career (e.g., entry into the NHL). In the fourth stage, the stress episodes were organized into figures to showcase their chronology across a player’s career and as a point of comparison where common (e.g., statistical production) and unique themes (e.g., leave team that drafted
participant into NHL) were identified. The figures served to inform the drafting of the present manuscript and posted early within each theme or sub-theme described in the result section.

Once a thorough list of stress episodes and pathways were identified, the fifth stage involved identifying the descriptive parameters of each episode and pathways in addition to refining the labels to better reflect the codes (e.g., *high quality team* changed to *within-team competition*). In the final - sixth stage, the over-arching themes, and various levels of sub-themes from broad to narrow along with their associated extracts were further examined during the writing process to ensure coherency. Each episode begins with a stressor, followed in cases by a sub-stressor, which generated an individual attempt by the NHL player to manage the stressor. Individual attempts can be accompanied by a contribution from a support network or the participant may have differed entirely to a coach, teammate, or family member to manage the stress. Each attempt was categorized as adaptive or maladaptive depending on the outcome.

### 3.5 Validity

Validity is attained through the application of a set of standards, which determine the extent that the findings are believable (Maxwell, 2002). The application of validity guidelines stems from the assumption that research findings must be viewed as credible by the reader (Maxwell, 2012). The guidelines counter an admission that the researcher possesses a limited understanding of the context being studied and the interactions that occur therein. As such, the potential exists for data collected to be misunderstood and misrepresented. By following validity guidelines, safeguards are put into place to ensure that the findings represent the general trends that occur within the National Hockey League and its professional athletes. For example, consultation with former NHL players could ensure that the themes, citations, and descriptions are interpreted correctly and that all relationships among and between each theme are positioned properly. In addition to
the interpretations of NHL players, the researcher can also compare the findings with the extent literature to establish some coherence among themes or justification for the existence of a theme and its interpretation. Maxwell (2002) established four validity guidelines that, if followed, build a sense of trustworthiness regarding the data’s interpretation and its links with existing theory. The guidelines also provide strategies for collecting the data (i.e., transforming audio recordings to transcripts) and determining relevant populations that stand to benefit from the themes. The reason for selecting Maxwell’s guidelines is that the author takes a comprehensive and exhaustive approach to ensuring that the findings are a credible representation of the participants’ experiences. Other guidelines limit themselves to variations of the aforementioned guidelines such as accurate transcription, reliability, theoretical coherence, and transferability. The data collection and thematic analysis adhered to Maxwell’s four validity guidelines: (a) descriptive validity, (b) interpretive validity, (c) theoretical validity, and (d) generalizability.

Descriptive validity requires an evaluation of the factual accuracy of each participant’s account. Factual accuracy means that the participant’s responses are readily available for the study and goes beyond a mere representation of their responses (e.g., notes, recall interview from memory). A high level of factual accuracy also means that researchers “are not making up or distorting the things they saw and heard” (Maxwell, 2002, p. 45). In the present dissertation, data was comprised of interview transcripts and descriptive validity was achieved through the use of two audio recorders (i.e., Panasonic IC Recorder). The recording began prior to the commencement of the interview and ended when the participant believed there was nothing further to discuss. Each recording was then transcribed verbatim (i.e., word-for-word) and to meet a high standard of descriptive validity, the text was reviewed and compared to the audio recordings so that the written matched with the spoken.
Interpretive validity defines as attempts by researchers to “comprehend phenomena not on the basis of the researcher’s perspective and categories, but from those of the participants in the situations studied” (Maxwell, 2002, p.48). Essentially, researchers want to have an insider’s perspective so that their findings are relevant to the people being studied. An insider’s perspective (i.e., emic) means that the words and experiences of the participants are authentically presented as opposed to being a re-presentation organized by uninformed researchers. In the present dissertation, two procedures involving an expert panel were done to ensure that interpretive validity was sought. First, the academic researcher conducted a preliminary analysis of the data. Afterwards, the data was organized into table format and presented along with corresponding quotations to the expert panel for verification of the thematic analysis. The expert panel was asked to consider the themes and sub-themes provisionally identified during the initial analysis and consider the trends in relation to their experiences. Consulting those intimate with the NHL context throughout the dissertation was the equivalent to member checking in Cho and Trent’s (2006) framework. Cho and Trent presented three types of member checking (i.e., technical, on going, and reflexive) and each of them were conducted as part of the current project. Technical member checking closely resembles interpretive validity and ensures that the participants’ experiences are authentically represented in research. On going member checking relates to having multiple others share their views and such attempts will be made through the expert panel’s involvement at each level of the project’s development. Finally, reflexive member checking is about facilitating a critical approach throughout the dissertation’s developments and was ensured through a reflexive journal (see Appendix E) and interview between the dissertation supervisor and the researcher.
Theoretical validity refers to the extent under which themes and patterns within an account can be associated with key concepts and relationships (e.g., hierarchy between themes and sub-themes) within the literature (Maxwell, 2002). When considering an account or several, depending on the participants in a given study, the concrete themes and patterns yielded from the data analysis ought to correspond with more abstract theoretical constructions. Within the present dissertation, the literature review included many concepts, including stress episodes, stressors, stress appraisal, adaptation, maladaptation, and career transitional content. As mentioned earlier, the later steps in the thematic analysis was to examine the data collected to locate any concrete themes that correspond with the theoretical concepts associated with adaptation. Further, the purpose of this step was to go beyond each participant’s perspectives and compare the findings with those systematized from previously established perspectives. For example, previous studies about NHL players contained information supporting the notion that media demands were stressful. From the present study, the findings support the notion however; media demands were only prominent in high profile teams. In a high profile teams, the media made players feel like they were under constant surveillance and evaluation. Yet, the media reflected the large fan base supporting the team and they long history of success accumulated in the league. In essence, the data supported one theoretical construct (i.e., media demands), which can now be situated within the theme of ‘high profile team’.

According to Maxwell, “generalizability refers to the extent to which one can extend the account of a particular situation or population to other persons, times, or settings than those directly studied” (p.52). Maxwell noted that generalizations are not readily made from qualitative work in the same manner as quantitative work. Instead, the theoretical developments can be used to explain the thoughts and behaviors of similar people and situations that resemble those
previously examined through a qualitative approach. There are two forms of generalizability: (a) internal, and (b) external. Internal generalizations occur within the community, group, or institution being studied yet include those that were not participants while external generalizations are about all other communities, groups, or institutions. Within the present dissertation, the general objectives were to learn about the monumental challenges that destabilized NHL players and how they re-established a sense of ease. The participants shared a similar cultural background of being Canadians so internal generalization will only be reserved to other Canadians in the NHL. As for external generalizations, caution must be exercised because Canadian NHL players are a group of male professional athletes from one country and their experiences may not resemble those of female professional athletes, elite amateur athletes, or elite athletes outside of Canada. Finally, the participants were recruited based on accessibility to the researcher from one university in northern Ontario since gaining a representative sample was complicated (e.g., gatekeepers, no NHL affiliation) and thus, highly unlikely (Hagy, 2002).

3.6 Ontology

Ontology refers to one of two philosophical underpinnings or beliefs that are associated with a methodological approach in qualitative research (Sparkes, 2002). More precisely, ontology is described as a formal, shared organization of knowledge (i.e., perspectives) that includes a set of concepts from a domain and relationships between each concept. There are two perspectives to consider: realism and relativism. Researchers that adhere to realism search for one definitive truth that can only be achievable through techniques that distance them from their work (i.e., objectivity), while those believing in relativism seek multiple truths which were attributed to and correspond with our varying personal backgrounds (Willis, 2007). Realism is presently the ontological perspective that dominates qualitative research in sport and physical activity
(Sparkes, 2002). According to Sparkes, there are two characteristics associated with a realist tale. First, authors are generally absent from the written manuscript while the words of the participants being studied are typically fore-fronted. Van Maanen (1988) stated: “The narrator of realist tales poses as an impersonal conduit who […] passes on more-or-less objective data in a measured intellectual style that was uncontaminated by personal bias” (p. 47). Essentially, realist authors distance themselves from their study with hopes of minimizing signs of involvement or subjectivity.

In previous relevant studies about NHL players by Battochio and colleagues, the authors’ noted that a semi-structured interview guide was employed, an expert panel and co-authors with contextual knowledge of the NHL were included, and the participants’ voices were fore-fronted all with hopes of reducing researcher subjectivity. As a result of these distancing strategies, the researchers proposed that the findings were truthful and could be obtained by others through replication. Within the present dissertation, individual interviews were held with each participant recruited. Once again, however, the interview guide included only general questions and probes designed to learn about the stress episodes experienced by each participant. Having the participants choose the topics for discussion ensures that the interviewer has less influence compared to an interview with a guide filled with questions. The second characteristic of a realist tale in qualitative research was the centrality of the participant’s point of view (Sparkes, 2002). Researchers quote participants by transcribing recorded interview data with hopes of giving the reader a strong sense of the participants’ voices. Herein, once the interviews were completed, an inductive thematic analysis was completed with the support of an expert panel. The researcher conducted the initial analysis which, simply put, was comprised of organizing quotations from the participants into categories that were part of figures that illustrated each stress episode. The
initial analysis was then presented to the panel that verified the analysis and most important for determining the oncology, selected the quotations that best represented each theme and sub-theme. For example, the researcher selected multi-sentence quotes that provided detail about a stressor or adaptation. However, the panel had a preference for utilizing quotes that were concise and representative of the theme or sub-theme in question. Therefore, a case can be made, based on the aforementioned distancing strategies, to categorize the present dissertation within the oncology of realism.

3.7 Epistemology

Epistemology is about the creation and dissemination of knowledge in an area of inquiry and specifically, it purports to: (a) acquisition, (b) veracity, and (c) limits of knowledge. In the present dissertation, knowledge was acquired through the recording of the individual interviews with current and former NHL players. The interviews were designed to help the participants identify and define their stress episode(s) with corresponding probe questions posed to generate additional insight. The present research questions were deemed appropriate following a comprehensive review of the literature about adaptation and NHL players and the potential benefits in meeting such objectives. To ensure that the content of the interviews corresponds with the research questions, probe questions related to stress episodes and subsequent adaptation pathways were asked throughout the interview. Probe questions were “used to deepen the response to a question, increase the richness and depth of responses, and give cues to the interviewee about the level of response that was desired” (Patton, 2002, p. 372). Essentially, probes were follow-up questions that generate additional information about a topic and, according to Patton (2002), there were four types of probes: (a) detail-oriented, (b) elaboration, (c) clarification, and (d) contrast. The abovementioned strategies for acquiring knowledge were
likely to generate specific information about each participant’s stress episodes in the NHL.

Lastly, an audio recorder was used to generate a verbatim transcription of each interview while notes were taken to get a sense of the thoughts that occupied the interviewer during the interview. As for the veracity of knowledge and whether the information generated from the interviews were truthful, individuals with contextual knowledge were recruited to verify information (e.g., data) at various stages of the dissertation and attempts at verifying the findings with the existing literature was done. Once data has been collected, it was imperative that the analysis was conducted by those with knowledge of the NHL context and the experiences of players therein so that the findings were not misrepresentation of stress episodes in the NHL. To guard against misrepresentations or unfounded views, Maxwell (2002) indicated that data must be analysed by contextually knowledgeable individuals / researchers familiar with the given context. For example, the panel explained that the same stressor could be perceived differently depending on the NHL player’s experience in the league and on the team (e.g., rookie, sophomore, veteran). The panel’s insights ensured that one of four validity guidelines were met (i.e., interpretive validity). Meanwhile, the remaining guidelines were followed accordingly to minimize the researcher’s involvement throughout the data collection and analysis stages. Next, attempts at verifying the findings in relation to the existing literature about stress, coping, and adaptation were done to further enhance validity. Maxwell indicated that trust in the knowledge generated was enhanced when it corresponds with established concepts. From the literature review about stress episodes, it was becomes evident that the concepts of stress, coping, and adaptation were comprehensive yet part of process that enables people, in this case athletes, to overcome stress episodes and re-stabilize oneself. Therefore, attempts were made to ensure that an appropriate level of validity was established to effectively answer to the research questions in
the present dissertation (Cho & Trent, 2006). Lastly, epistemology includes questions about the limitations of our knowledge. In the present dissertation, the findings originated from the experiences of professional male athletes from one sport. Despite potential resemblances, there were less implications for elite amateur athletes and others competing in professional sport, especially female professional athletes.

Based on the applications surrounding the acquisition, veracity, and limits of knowledge in the present thesis, the epistemological approach is post-positivism. Post-positivism derives from positivism where researchers believe that knowledge can be acquired in an objective manner regardless of the phenomena being studied. Instead, post-positivism is an approach that acknowledges the complexity of phenomena and that objectivity is unobtainable in all investigations. However, there are epistemological applications that can be employed to ensure that the investigation was conducted in a reliable, valid, and trustworthy manner. In the present dissertation, multiple measures have been cited including consulting an expert panel, designing a series of topics and questions for the participants, and reaching a negotiated consensus regarding the inductive thematic analysis. Thus, the epistemological approach is post-positivism.

3.8 Chapter summary

The method section within the present dissertation was comprised of five sections: (a) participants, (b) expert panel, (c) data collection, (d) inductive thematic analysis, and (e) validity. First, the participants were male professional ice-hockey players from the NHL. They ranged in experience from rookies to veterans and onto players that had retired from the sport. Each participant had played in the NHL and spoke about their respective stress episodes. Second, an expert panel was assembled to provide guidance throughout the present investigation. Essentially, the researcher had little history with the NHL and the panel provided insights which
prevented misinformation and unfounded views from purveying throughout the study. Third, data collection was comprised of an unstructured conversational interview where the participants were given the opportunity to discuss their stress episodes while the interviewer followed-up with probe questions. Fourth, an inductive thematic analysis was done to collate the content from the interviews that responded to the research questions. Braun and Clarke’s (2006) analysis protocol was followed to convert the raw interview data into meaningful results. Finally, validity guidelines were implemented to ensure that the results reflected the experiences of the participants rather than any unfounded views from the researcher.
CHAPTER 4

4 Results

Stress episodes are the encompassing of a stressor or multiple stressors that necessitate an effort from the professional athlete’s behalf and, in some instances, from their network in an attempt to resolve the stress. Depending on whether the stress is managed, the effort can become adaptive or maladaptive. In the NHL, stress episodes can be reserved for a given time in an NHL player’s career, which include: (a) entry into the NHL, (b) staying in the NHL, and (c) becoming an All-Star. Meanwhile, stress episodes can also destabilize players at any given time in their careers. Across-career stress episodes include: (a) high profile team, (b) injury, and (c) relocation. Forthcoming is a description of each stress episode in addition to themes and sub-themes therein. The description is followed by representative quotations from participants at various career stages and their interpretation. \textit{R} denotes rookie, \textit{V} denotes veteran, and \textit{Re} denotes Retired NHL player. Each stress episode is summarised in the form of a portrait vignette with hopes of conveying the overall experiences of the participants (Spalding, 2004; Spalding & Phillips, 2007). Lastly, a discussion about the recurrence of each theme will take place.

4.1 Entry into the NHL

Entry into the NHL is about the stress experienced when players are first contacted by an NHL team until they play in their first NHL game. The period is marked by a transition from college or junior hockey into the professional ranks with hopes of reaching the NHL. The first episode of \textit{NHL entry draft} included one adaptive (i.e., \textit{control draft distraction}) and one maladaptive strategy (i.e., \textit{draft obsession}) for draft year pressure and one adaptive strategy (i.e., \textit{personal insight}) for NHL combine. The second episode of \textit{NHL camps} included two adaptive strategies
(i.e., learn team’s approach and coach – approach advice) at development camps and five adaptive strategies (i.e., family – camp advice, camp expectation, agent – roster advice, team needs, and compete level) and two maladaptive strategies (i.e., roster spot uncertainty and teammate – steroid use) for training camp. The stress episode of a minor league assignment was followed by one adaptive strategy (i.e., readjust expectations). With regard to the final episode of entering the NHL, an NHL call-up was met with two adaptive strategies (i.e., coach – tactic advice, and compete level).

4.1.1 NHL entry draft

Flowchart 1

The sub-stressors associated with the NHL entry draft along with individual strategies followed by possible outcomes

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHL entry draft</td>
<td>Draft year pressure</td>
<td>Control distraction</td>
<td>High draft pick</td>
</tr>
<tr>
<td></td>
<td>NHL combine</td>
<td>Personal insight</td>
<td>High draft pick</td>
</tr>
</tbody>
</table>

Italic represents a maladaptive pathway and outcome from the sub-stressor.

The NHL Entry Draft is where NHL teams select junior ice-hockey players at 17 years of age.

During the player’s draft year, two stressors occur: draft year pressure, and the NHL combine. Draft year pressure is overcome by controlling draft distraction or overwhelms a player when they felt a draft obsession. The NHL combine is overcome when players show personal insight.

4.1.1.1 Draft year pressure

Draft year pressure is about the aspirations of draft-eligible players to be an early selection in the NHL entry draft. Players picked early in the draft by NHL teams are given a better entry-level
contract and greater odds to secure an NHL roster spot. At the beginning of the draft eligible season, players are ranked by media outlets, fans, and scouts with their ranking fluctuating in relation to their performances in junior hockey. One rookie expected to be selected first overall at the start of the season dropped as the season came to an end. He stated: “It was pretty stressful knowing there were scouts expecting you to play well. They were watching even when you were away from the rink. It’s tough on the mind and the body” (R3). When a player is touted to be a first overall selection, there is much attention given from NHL media and team representatives. They wanted to profile the qualities that made the player into one of the most sought after junior players. For the player, such attention was atypical and an adaptive response would have been to manage the newfound attention. A second rookie spoke towards the prevalence of NHL scouts at their junior hockey games. He stated: “It’s tough because you can’t slip up. There are so many eyeballs there that see the mistakes you’ve made. They have seen all of your games and even some practices” (R4). NHL scouts are expected to put together comprehensive reports about potential prospects, which is made up of information gained through observations at games and practices. Prospects hope to positively showcase themselves even though they are young and prone to making mistakes. When the remaining participants are considered, one retired player recalled feeling stressed out by the draft year pressure. He stated: “Where the pressure began, was going into my NHL draft year. At the start, I was rated as a top five pick in the draft. But at the end of the year, I dropped down” (Re3). Ultimately, a high ranking from NHL team and media representatives put overwhelming pressure on two participants whose productivity and corresponding rank declined from the start until the end of their NHL draft year.

4.1.1.1.1 Controlling draft pressure

Controlling draft pressure refers to a prospect’s ability to manage the pressures that go with
being expected to be a high pick in the NHL entry draft. Given its importance, the NHL draft can distract players from concentrating on their training and performances. However, many participants handled it better than others and were selected early in the draft. According to the participants, one common way to control the distraction was to concentrate on team success. One retired player explained: “When I was playing, I was more worried about winning the game than who was in the stands watching. There was no pressure there at all” (R8). By emphasising team success, players allocated their attention away from their individual performances and were better able to compete with little regard for the draft. Consequently, players performed at or above expectations leading to a high selection in the NHL draft. One retired player that was selected first overall in the NHL entry draft attributed his effective management of draft year pressure to the regularly showing his talents. He stated: “I was never pre-occupied with scouts or the draft. I knew as long as I scored goals and created opportunities, they were never going to affect me” (Re5). The retired player had an exceptional junior hockey career, which was the product of maintaining a regular focus on scoring instead of individual awards or, most important for the present stress episode, the NHL entry draft.

### 4.1.1.1.2 Draft obsession

Draft obsession is when junior or college players have incessant thoughts about the NHL entry draft and closely measure their individual performances in relation to its influence on their draft ranking. As previously discussed, players undergo much pressure during their draft year. They may respond adaptively by controlling the pressure or in a maladaptive way by obsessing over positioning themselves for an optimum entry-level salary. In the present study, two participants admitted to being obsessed with the draft in junior hockey and saw their rank drop as a result. One rookie was predicted to go first overall at the start of the season and lowered his rank at the
end of the season by playing poorly. He attributed his poor performance and lower selection to permitting the draft to consume his thoughts. When asked for example of these thoughts, the rookie responded: “You are too careful with everything you do and try to bring it every night because you don’t know how often each individual scout is going to watch you play” (R3). Overemphasizing the importance of one’s performance in relation to the draft is a sure sign of an obsession, which can have a debilitating effect on a potential NHL player. One retired player also expected to be selected early in his draft year noted that his obsession with personal statistics prevented him from playing well. He stated: “I had a really good first year in junior and when I was in my draft year, I expected my numbers to go up. But they stayed the same and it got to me” (Re3). The retired player’s expectation to be selected early was a result of his positive statistics from the previous year. When he struggled to surpass those statistics, he worried about the negative effect it would have on his ranking in the draft and his subsequent performance was affected. Had he been able to control his obsession over the draft, his statistics would have improved throughout the season and in the end, he would have surpassed the previous totals.

4.1.1.2 NHL combine testing

The NHL combine is a mental test for the top 100 prospects of the corresponding NHL entry draft. The mental assessments were highly trivial since managers, coaches, and scouts from interested NHL teams collectively interviewed each prospect with only rookies choosing to discuss the stressor. One rookie recalled a scout that had been to all of his games asking, “how come your first half of the season wasn’t that strong?” (R1). He was challenged in front of the entire team to provide a satisfactory answer or risk leaving the scout and his colleagues with an unfavourable impression of him. Next, the scout followed up with another query in which the rookie had to finish the following sentence “(Name) doesn’t make the NHL because…” (R1).
With this query, the scout is taking a negative approach with hopes of seeking out an internal or external attribution and using the response as grounds, especially in the case of an internal attribution, to select the player in the draft. Indeed, testing at the combine is a job interview with prospects being interrogated extensively so that teams are comfortable pooling the team’s resources into their development.

4.1.1.2.1 Personal insight

Personal insight refers to the carefully constructed responses provided by the prospects during their interviews with NHL teams at the combine. With responses that reveal personal insight and awareness, players are likely to find a suitor very early in the draft and thus secure a sizable salary. The rookie that had to finish the sentence explaining why he failed to make the NHL provided a careful response. He stated: “I didn’t want to blame somebody else for not making the NHL. So I put it on myself” (R1). In addition to the aforementioned sentence to finish, a common inquiry was made into the prospect’s material purchases after signing their first NHL contract. The question is asked to catch prospects talking about major purchases that are immature (e.g., luxury cars, boats, clothes, video games). When reflecting on the question several years later, a veteran reasoned: “They look for the guy that is going to say that they’ll buy a car so I stayed away from a materialistic answer because that’s how they know you are in it for the money” (V5). Ultimately, a prospect’s carefully constructed responses during an interview at the combine were informative opportunities for teams to compile a comprehensive profile of valued prospects. Responses that provide insight into the prospect’s personality were welcomed by management and ensured that the prospect was selected high in the draft.
4.1.1.3 NHL entry draft vignette

The NHL entry draft is the first stress episode related to a career in the NHL. The draft resonated with the participants approximately one year before its occurrence. Junior and collegiate players with the same birth year are measured against one another as prospects and selected in order of potential to contribute in the NHL. Measuring and assessing prospects throughout the year leading up to the draft placed pressure on them to perform and make a case to being a potential NHL player. Some participants handled the pressure well and were rewarded by being selected early in the entry draft. These participants attributed the result to being focused on their individual and team performances (e.g., score game winner and team win division title). They were heavily invested in their team’s success, which was a form of controlling any distraction from the entry draft. On the other hand, players that focused on their individual performances and situated them in relation to their draft ranking or other prospects felt stressed and under pressure to play well. These participants were obsessed with the entry draft and their performance suffered, which meant that they were drafted much lower or worse undrafted. The constant assessment of prospects and their performances reached a peak with the top prospects were invited to the NHL combine, a mental and physical evaluation from all NHL teams simultaneously. The combine is highly stressful and participants felt like a ‘piece of meat.’ They seemed comfortable with the physical tests but the mental tests (i.e., individual interviews with teams) were worrisome. The players were unsure about the series of questions that they would face but knew that they needed to show that they were insightful and let teams draw their own conclusions. Despite the worries going into the combine, the participants walked away knowing that they likely improved their chances of being selected higher in the entry draft.
4.1.2 NHL camps

Flowchart 2

The sub-stressors associated with NHL camps along with individual and interpersonal strategies followed by possible outcomes

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team</td>
<td>Approach advice</td>
<td>Team – Approach advice</td>
<td>Invite to training camp</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development camp</td>
<td>Learn team’s approach</td>
</tr>
<tr>
<td>Family</td>
<td>Camp advice</td>
<td>Family – Camp advice</td>
<td>Camp expectation</td>
</tr>
<tr>
<td>NHL camps</td>
<td></td>
<td>NHL camps</td>
<td>Team – Approach advice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NHL camps</td>
<td>Team – Approach advice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training camp</td>
<td>Team – Approach advice</td>
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<td></td>
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<td>Team – Approach advice</td>
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<td></td>
<td></td>
<td>Team – Approach advice</td>
<td>Team – Approach advice</td>
</tr>
</tbody>
</table>

*Italic* represents a maladaptive pathway and outcome from the sub-stressor.

Team camps are two separate off-season meetings for team members with one occurring in the middle of the off-season and the other prior to each season’s beginning. The camps are as
follows: (a) development camp, and (b) training camp respectively. At development camps, players could learn about the team or gather advice about the team’s approach from coaches. Training camps were managed by either setting training camp expectations or identifying the team’s needs, with roster advice from an agent, and using a high compete level to fill that need. Players also acknowledged failing to make the team out of training camp due to roster spot uncertainty and some teammates using steroids.

4.1.2.1 Development camp

A development camp is for drafted and invited prospects to learn about being an NHL player for the host team. The camp is held in the off-season for two weeks and serves as the participant’s first “in-depth” contact with the team. Given that it is an introduction, participants were unfamiliar with the event’s activities. One rookie stated: “It was very nerve wracking because I was a young guy, undrafted, and didn’t know what to expect” (R1). Indeed, being undrafted and invited to the development camp served as preconditions that left the aforementioned player in the dark about his expectations. On the other hand, drafted players were given some advanced understanding to the development camp’s proceedings: “I was nervous because it was the first time but they were in contact with me leading up to the camp. So I had an idea of what it was about” (R3). When it began in the 1990s, development camp were run differently and they involved isolating prospective players for a prolonged period and putting them through intense training sessions that informed teams about the limits of each player. When one veteran recalled his experience at a development camp, he pointed out that he endured additional stress due to the competitive nature of the camp. He explained:

That was my first eye opener. They sequestered you and you were under their surveillance working and skating every day. There was a constant competition with
everybody and I think it burnt me out and burned out a lot of guys. But you don’t need to be constantly in competition in the off-season and being monitored every day where you are either going to make it or break it. It’s farfetched that you think of it that way but that’s how they treated you. (V1)

Currently, development camps are no longer of this nature and instead, they introduce prospective NHL players to a given team’s approach to competing in the NHL. Yet, the introduction is still stressful given that players used the camp to set themselves apart from their prospective teammates and become viable blue-chip prospects that could conceivably capture a roster spot at training camp.

4.1.2.1.1 Learning about the team (Coach: Advice about team’s approach)

Learning about the team refers to attempts by prospects and rookies to understand their team’s approach and expectations regarding their performance at development camps. One rookie recalled: “When I went to the development camp for the first time, we had a week to learn a brand new system from a bunch of coaches that you didn’t really know” (R3). Given the limited time available, players must seize the opportunity to learn about the team’s preferred tactics at even strength and on special teams. While most players agreed that they engaged in discussions about the team’s tactics, additional information obtainable through observation. One veteran explained: “It had some other benefits. I learned how to train like a pro and saw what it took to be a pro at that level” (V1). Even though they were uninvolved leading up to development camps, coaches were credited with establishing a sense of ease among some players. Particularly, players were more hopeful of getting on the team when coaches gave advice about the team, its needs, and the achievements that will afford them a roster spot. One rookie remembered a
briefing he had with the head coach about his first development camp and his eventual year in junior hockey. The player stated: “They say what they expected at camp. They said that ‘we expect you to produce points. Then, when you leave, we would like to see you on the World Junior team, play on an elite team, etc.’” (R3). Development camps are highly stressful for players making their first appearance as a member of an NHL team. When they seek out information about the team’s tactics and needs in addition to taking the advice of coaches, players have a viable pathway to getting an invite to training camp and a better chance of immediately making the team.

4.1.2.2 Training camp

A training camp is held in the fall prior to the start of the NHL regular season where prospects compete for an NHL roster spot while rookies and veterans, who already have a spot, prepare for the upcoming season. The task of making the team is complicated by the fact that most players enter training fully healthy. One rookie felt hopeless about his chances of capturing a roster spot in his first camp. He recalled: “for the most part, [management and coaches] already had a good idea who was going to be on the team. Plus, there were no injuries.” (R2). Unseating healthy and established players during training camp can be frustrating experience and prospects are usually sent to the minor league affiliate team where they must wait for a chance to join the team in mid-season. The unfavourable view of training camp is also shared by players with a roster spot because they could be competing against teammates for special team opportunities, captaincy, or a chance to play with talented line-mates. The competition creates a divide among teammates because of the results-driven nature of professional sport, which conflicts with the team-centered approach needed to be an elite NHL team. One veteran recognized this problem and questioned the necessity of competition in training camp: “I could tell you that in how many years of
training camp, they still suck. It’s different. It’s not the anxiety. It’s just not a fun time of the year” (V1). Training camps are unpleasant because of the participants competed against teammates with hopes of increasing trust between themselves and management and the coaching staff. The loyalty of management and coaches is never assured for long and players add further stress when they compete recklessly at the cost of injuring a future teammate. If they harm or nearly injure another in training camp, they risk destroying possible relationships with future teammates. Therefore, the balance between competing in camp and forging strong relationships with teammates is difficult to strike.

4.1.2.2.1 Camp expectations (Family member: Camp advice)

Camp expectations refer to the objectives held by the participants as a prospect attempting to capture a roster spot in training camp. Among the participants, many recalled setting objectives to leave a favourable impression on NHL coaches and management. One rookie stated his expectations going into a recent camp in which he made the team: “You just want to show them that you can keep up with the pace by working hard and using your big body” (R4). The aforementioned quote resembles those obtained from other rookies about the importance of matching up well again others and leaving a favourable impression. In addition to these general objectives, veteran and retired participants explained that camp expectations were much more precise as they grew familiar with training camp protocols. One retired player noted: “You have worked hard all summer and should have some great results because you know about that one big day of endurance and strength testing” (Re2). Veteran players familiarized themselves with the off-ice and on-ice tests at camp so they were capable of preparing during the summer time. Outside of personal experiences, it was possible to gain insight about training camp procedures through a family member, if they had an NHL career. One rookie singled out a family member
with NHL experience for providing advice about the tests prior to and during his first training camp. He stated: “(Name) helped me with that. He’s been there and done that. We called each other all summer long and he told me to keep going when I was being tested at camp” (R4). With the uncertainty of a roster spot and the lack of communication from coaches, training camps intimidate even the most well regarded prospect. However, setting expectations about the tests undergone at training camp appears to be one adaptive pathway. Also worth noting is that the objectives can be obvious if a player has access to insights regarding training camp tests from a member of the family.

4.1.2.2.2 Identify team needs and high compete levels (Agent: Roster advice).

Identifying a team’s needs refers to players knowing about the vacant roster spots and the qualities typically associated with that spot (e.g., role player, depth defensemen). High compete levels mean that players are employing an assertive approach during training camps regardless of knowledge or experience. At most training camps, there is an opportunity for a player to capture a spot. Several participants explained that they were well aware of which spots were available because they had identified the team’s needs by examining, for example, the team’s salary commitments (e.g., multi-year contracts). One retired player stated: “It wasn’t a hidden fact that the (team) needed a physical, left-winger. In junior, I was an all around centerman but I made the team doing what they needed” (Re3). In essence, the aforementioned player attributed his success to recognizing and accepting the responsibilities (e.g., hitting, fighting, scoring) associated with a vacant roster spot. Next, the acceptance of these responsibilities needed to be obvious to the team’s coaching staff and manager, with every successful play standing out during training camp. The ability to stand out or show that one has accepted the responsibility of a
position occurs by demonstrating a high compete-level. The aforementioned retired player added: “I never wanted to be embarrassed as a player whether it was fighting or losing a battle in the corner or driving to the net, not being able to do it because someone held me up” (Re3). From the quote, the origin of a high compete level become evident since players want the quality to be part of their identity in the NHL. In many cases, players sought to bring their identity from junior into the NHL context. Another retired player made a similar assertion: “I think my compete-level was really high. I didn’t fight at training camp but I made sure that I hit and that I was really physical. I tried to do the things that got me there” (Re10). Outside of personal efforts to adapt in training camp, player agents could assist in identifying the team’s needs and convince their clients to showcase the qualities needed. One retired player recalled a conversation held before his first NHL training camp. He noted: “My agent mentioned said ‘(team) had another young centerman in the minors so the spot for the center-ice position wasn’t there and it might not have been for a few years’” (Re4). From the initial discussion with his agent, the player was sure to demonstrate the qualities that would address the team’s needs at the time. The retired player made the team out of training camp and proved that agents could be a viable source for roster advice.

4.1.2.2.3 Roster spot uncertainty (Teammate: Steroid use)

Roster spot uncertainty refers to the ambiguity surrounding one’s chances of capturing a roster spot in training camp. When players felt unsure about how many roster spots were available, their chances were usually very slim of making the team. The uncertainty was compounded when players felt alienated by team members, especially in their first camp. Many participants looked back at their first camp and held the same impression, which resembled the following statement by one rookie: “You don’t have a clue what’s going on because the coaches don’t say
much to you” (R5). Repeatedly, participants were forthcoming in saying that that training camp
is filled with uncertainty until one veteran offered justification for the shared impression. He
stated: “Breaking in, you are in awe. You are not sure or comfortable. You are a little insecure
about where you are in the pecking order or where you could fit. I think everybody goes through
that” (V1). Exposure to unknown teammates, unfamiliar coaches, and a new facility made most
young players uncomfortable and unsure of their spot on the team. The uncertainty turned into
feelings of hopelessness for one retired player who struggled to play consecutive full seasons in
the NHL. While constantly on the fringe of capturing a roster spot, the participant in question
had to compete for the last spot against teammates that had allegedly engaged in steroid use. The
retiree recalled:

I was always trying to show up in shape. But there were other factors involved and one
thing that I didn’t realize was the abuse of steroids. You come to camp and there were
guys that were nobody players and the next thing you know they are like “I worked out
all summer.” They were the fastest guys on the ice. (Re8)

A second retiree corroborated the prevalence of steroids when he stated:

The steroid testing is vague and minimal in the NHL. They don’t test you during training
camp when it’s crucial to make a team. Also, they don’t test you in the playoffs when you
need that stamina and a steroid might come into play. (Re13)

Most importantly, the two retirees acknowledge the significance of capturing a roster spot during
training camp since they had teammates that would cheat to get an NHL contract. The
consequences for these two retirees were short NHL careers and long minor leagues careers.
4.1.2.3 NHL camps vignette

NHL camps refer to the within-team competition organized by NHL teams in the summer and fall between the NHL Stanley Cup playoffs and the NHL regular season. The development camp is attended by prospective NHL players and each of the rookie and veteran participants attended the camp and had experienced some stress from the unfamiliar surroundings to the unknown team members. Following a strong showing at the development camp, participants were well-positioned to attend training camp and the way to get an invite to training camp was by having an open mind and learning from the staff and coaches about the team. Once the participants arrived at training camp, they would compete for a roster spot. The competition in training camp was fierce and interestingly, three pathways emerged from the participants. First, participants set expectations throughout the training camp with hopes of meeting the ultimate expectation of making the team. The within-camp expectations were also constructed by family members that had previous experience at NHL training camps (e.g., father, uncle, brother). Second, instead of being focused on oneself, participants chose to identify the team’s needs (in some cases through consultation with a player agent) and show that they could perform well in the role. The approach involved some flexibility on the part of the participant to do less glorified tasks on the ice (e.g., battle in corner, fight) but they were given an NHL roster spot. Third, some participants acknowledged that early in their careers, they were unsure about their chances of making the team. They attended training camp with little confidence and felt resound to the fact that they would be assigned to the minors. Interestingly, there were two retirees that attributed the sense of hopelessness to the prevalence of steroids in the NHL by their competing team members in training camp. These two participants were convinced that their roster spot was taken by a player
using performance enhancing drugs and given their roles (i.e., checking line players), the importance of a player’s physical strength cannot be underestimated.

4.1.3 Minor league assignment

Flowchart 3

*The stress of a minor league assignment along with individual strategies that lead to outcomes*

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor league assignment</td>
<td>➔ Readjust expectation</td>
<td>➔ Receive NHL call-up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➔ Resisting readjustment</td>
<td>➔ Remain in minors</td>
<td></td>
</tr>
</tbody>
</table>

*Italic* represents a maladaptive pathway and outcome from the sub-stressor.

Minor league assignment refers to the expectation of an NHL prospect to report to the affiliated minor hockey team of an NHL team after being released during training camp. Many players hope to obtain an NHL roster spot immediately after junior or college hockey. However, the reality is that most are assigned to the minor leagues after training camp. When a player expects to capture an NHL roster spot in camp, a minor league assignment is disappointing. One rookie expressed his feeling after being assigned to the affiliate team: “The coach called me in and said ‘we are sending you down.’ It was really a shock to me and it hurt because I thought I was playing great” (R3). While initially being sent to the minor leagues is problematic, a prolonged assignment added stress on players since they were left frustrated and wondering if they were going to play in the NHL. One veteran voiced these feelings: “The assignment was one of those frustrating times where you are down on yourself and you start to think that maybe you belong in the minors” (V2). The assignment to the minors was so long for one retired NHL player that he resented his first NHL team: “When I signed with (team), everybody was getting called up and I was the second leading scorer on the team and I wasn’t. I was very upset” (Re6). Being assigned
to a minor league team and remaining at that level was distressing for NHL players. The distress was expressed through the shock of being assigned to the minors, frustration over watching players get called up ahead of them, doubt regarding their chances of having a career in the NHL, and in some cases, anger towards the NHL team management for their decisions. Further, the stress is compounded by the need for an NHL player to get hurt or traded before a roster spot was available, which was outside of the player’s control.

4.1.3.1 Readjust expectations

Readjusting expectations refers to setting and meeting objectives in the minor leagues that position players for an NHL call-up. Though being released to the minor league team is disappointing, several participants spoke about forming expectations centered related to being the best in the minor league. One rookie made the adjustment and accomplished numerous feats in half a season:

I spent 42 games in (city). I played the first line. I played the first line power play and killed penalties. My confidence grew. It was at the point where I was dominating the American league as a rookie. I had well over a point per game. I got invited to the all-star game and played in that too. (R3)

The participant’s response exemplifies the adjustment that players needed to make and the results necessary (e.g., all-star status, point per game) in order to captivate the attention of NHL teams. On the other hand, some players were not ready for the NHL and needed to utilise their time in the minor leagues for professional development. One retiree listed the areas that he needed to improve before considering a promotion: You have to get stronger and quicker. You have to learn the game. I think that’s especially important as a defenseman that you are always learning the game and making adjustments (Re1). The two aforementioned quotes get at two
distinct objectives that players in the minor leagues must accomplish. First, they must obtain tangible results that situate them among the best players outside of the NHL. Second, the minor leagues can be context where players learn about themselves and the professional context with the new knowledge transferring into productivity in games.

4.1.3.2 Resisting readjustment

Resisting readjustment refers to a maladaptive strategy that prevented professional hockey players from permanently leaving the minor leagues for the NHL. Most of the participants had careers in the NHL yet there were two participants that played more minor league games than NHL games. Indeed, there are external complexities that can prevent a player from being call-up (e.g., priority of prospects, injury, coach’s preference). However, players can be held responsible for their failure to meet the expectations assigned to them at the highest level because they resisted making an adjustment. In essence, a call-up to the NHL will likely mean featuring in a lesser known role and players are likely to succeed in the role if they anticipated it in the minor leagues. One retired participant stated:

If I could go back and do it again, I’ll tell you the route that I would take. I would get onto the third or fourth line where you block shots and kill penalties. It’s not as rewarding but you can still make a really good living out of it. You find that a lot with the checkers in the NHL. The fourth line guys were offensive guys in junior and maybe a little bit in the AHL. But there are only a certain amount of spots that go around. I think the guys that can adapt the quickest and change their game to play on the bottom two lines are going to have the longest careers in the NHL. (Re2)

Essentially, the minor leagues can serve as an opportunity for players to adjust their expectations and build confidence so that they are prepared to handle a lower profiled role in the NHL. In the
aforementioned citation, the participant showed a resistance to making the adjustment and subsequently had a longer career in the minor leagues than the NHL.

4.1.3.3 Minor league assignment vignette

Following the first few training camps, most of the participants were assigned to the NHL team’s minor league affiliate. The assignment was frustrating when players played well in training camp yet still received the demotion, which puts into question whether there was an opportunity to make the team in the first place. Regardless, participants needed to adjust their expectations so that they suited the role they would play in the minors. Quite frequently, they were the point producers on their minor league teams but they needed to anticipate that if they were to be called up to the NHL, the expectations would be different. For instance, they might be expected to play a checking-line role and so the participants would seek out opportunities to score at even-strength through a turnover and counter attack rather than drawing penalties and creating scoring opportunities from the power play. The focus on generating scoring opportunities at even strength in the minors would build confidence in the player’s ability to create scoring opportunities in the NHL, though less frequently.
4.1.4 NHL call-up games

Flowchart 4

The stress of an NHL call-up along with an individual and interpersonal strategy followed by one corresponding outcome

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHL call-up</td>
<td></td>
<td>Coach – Tactic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>advice</td>
<td></td>
<td>Compete level</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Remain in NHL</td>
</tr>
</tbody>
</table>

NHL call-up games were the participant’s first few games as an NHL player. Typically, the participants were given minor league assignments when they were young professionals and only called-up to the NHL after an existing player was traded, injured, or underperformed. While the participants were excited to participate in their first few NHL games, they felt overwhelmed by their opponents and pressure to please their coach. The feeling of being overwhelmed arose when the participants gave much respect to an opponent (e.g., admire opponent’s skill). One rookie recalled was respectful to the point of amazement:

We played (team). They won the Cup the year before and were stacked. To be able to play when (name) was on the ice, you have to try not to be too in awe. But, at the same time, you catch yourself looking around at all of the talent out there. (R2)

In addition to feeling overwhelmed by the talent in the NHL, players also experienced pressure to avoid mistakes. The pressure affected one veteran who later expressed a regret in his first few games: “You try not to make a mistake or stand out in a way where you cost the team. I am sure
my linemates weren’t happy. They wanted to make some more plays.” (V4). In this case, the pressures of avoiding any failures had a debilitating effect on the player who was only conscious of the effect in retrospect. The consequences were that he and linemates were unable to create scoring opportunities or spend time in the offensive end, which put into question their future in the NHL.

4.1.4.1 Compete level (Coach: Tactic advice)

Compete level refers to the assertive approach taken by players in their first few NHL games despite a relative lack of experience. The individual strategy was also employed in training camp by some participants (see training camp stress) and signalled a transition away from a shy and passive player to a contributing member of the team. One veteran recalled himself making the transition after being called up to his team in the playoffs:

That’s where I made a name for myself. At the start of the playoffs, I didn’t play but I played all of the games at the end. I made a name for myself in the playoffs. I played hard and made sure the other team knew I was there. My coach had no choice but to play me. (V2)

Though it is difficult to discern the circumstances that enable players to be assertive after a call-up, the observation of NHL teammates during practices and games gave the participants a sense of how to conduct themselves. One retired participant observed his veteran teammates as a rookie. However, he attributed his thorough understanding of his teammates’ professionalism to one coach’s involvement. He stated: “(Name of coach) was very good at communicating and told me ‘when you are on the bench, don’t look up in the stands or the clock, follow these players and tell me why they did that” (Re1). The instruction (i.e., observe veteran) and reflective activity
(i.e., analysis of veteran’s tactical decision) were a way for coaches to enhance a recently called-up player’s knowledge of the NHL game and facilitate an assertive approach in games.

4.1.4.2 NHL call-up vignette

The call-up to the NHL is one of the most exciting news a professional ice-hockey player can receive. They dream about the call from childhood onwards and when it happens, there are emotions of joy and pride. These feelings eventually become replaced with worry and fear as the player immerses himself within the NHL team. NHL teammates and coaches are welcoming, however the reality is that the player will compete alongside and against the best ice-hockey players in the world. Insecurities and thoughts about whether the player belongs in the league surface but the participants proposed a means to overcome these thoughts. They revealed that showing a high compete-level was a way to mitigate the stress. A high compete-level means that players were aggressive on the ice by hitting, making plays, and shooting in the first scoring chance. Soon after, the energy began to fade and players slowed down which made the play and other players speed up. As such, the participants noted that they increasingly became dependant on the coaching staff to better understand them and advise them on tactical situations that favoured their skill set. Essentially, coaches gave them advice regarding their positioning in games so they were allowing the opposing team to generate scoring opportunities and they were building a synergy with their linemates.

4.2 Staying in the NHL

Staying in the NHL was the objective of the participants after they played in their first few NHL call-up games with hopes of avoiding an assignment to the minor leagues. The second career stage of staying in the NHL included two stress episodes: (a) competition (sub-theme: within-team and opponents), and (b) basic statistics. The first episode of competition included one
adaptive strategy (i.e., *self-driven focus*) and one maladaptive strategy (i.e., *NHL doubt*) as part of the within-team competition and one adaptive strategy (i.e., *knowledge of opponent*) and one maladaptive strategy (i.e., *overwhelmed by NHL talent*) within the stressor of opponents. As for the second episode of the stage, *basic statistics* included two adaptive strategies (i.e., *role expectation*, and *teammate – trust linemate*) and one maladaptive strategy (i.e., *coach – withhold playing time*).

### 4.2.1 Competition

**Flowchart 5**

*The sub-stressors associated with competition along with individual strategies leading to one corresponding outcome*

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>Within-team</td>
<td>Self driven focus</td>
<td>Maintain NHL spot</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Doubt NHL spot</em></td>
<td><em>Demotion to minors</em></td>
</tr>
<tr>
<td></td>
<td>Opponent</td>
<td>Knowledge of opponent</td>
<td>Maintain NHL spot</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Overwhelmed by NHL talent</em></td>
<td><em>Demotion to minors</em></td>
</tr>
</tbody>
</table>

*Italic* represents a maladaptive pathway and outcome from the sub-stressor.

Competition refers to the players that the participants competed against within the team structure and in terms of opponents. The stress of competition was the one of two overarching stressors experienced during the second career stage after capturing an NHL roster spot. Competition included two sub-stressors: (a) within-team, and (b) opponents. One adaptive strategy (i.e., *self-driven focus*) and one maladaptive strategy (i.e., *doubt NHL spot*) resulted from the within-team stress and one adaptive strategy (i.e., *knowledge of opponent*) and one maladaptive strategy (i.e., *overwhelmed by NHL talent*) followed the stressor of opponents.
4.2.1.1 Within-team competition

Within-team competition refers to teammates or potential teammates (e.g., blue-chip prospects, free-agents, traded players) that challenged participants for their roster spot. Such competition resonated mostly with rookie and sophomore NHL players. One retired participant confirmed the notion of experiencing limited playing opportunities as a prospect and sophomore when he stated: “In (city), I played with (names). These were Norris trophy candidates [(i.e., best defensemen)]. I wasn’t under any illusion that I was going to play a regular shift and I didn’t” (Re1). Having All-Star teammates preventing one’s insertion into the NHL is relatively clear and easy to accept. However, some participants also received limited ice-time compared to similarly established teammates. One veteran cited “people in the way” as a reason for his difficulty staying in the NHL. When prompted for clarify, he added: “Every year, there are always new faces coming in. If you are not getting the job done, the manager makes trades and brings in new people. That’s what I mean by ‘people in the way’” (V2). There is always internal competition that prevents players from remaining on an NHL team. The competition is especially fierce among rookie and sophomore NHL players who feel vulnerable and expendable should they fail to contribute to the team’s on-ice success.

4.2.1.1.1 Self-driven focus

Self-driven focus was about players that held a roster spot and wanted to ensure that they could resist a challenge for the spot from another prospect. Two qualities associated with these individuals were high levels of motivation and concentration. A high level of motivation was expressed through the effort one exerted as noted by one veteran:
In my second year, I wanted to be an NHL player. You work hard in the off-season just like anybody else. If you work hard, there is always someone that is working harder. So you want to work even harder. Someone is going for your job and at the same time, you are going for somebody else’s. (V2)

The participant acknowledged the challenge from prospects and accepted it by willingly engaging into the training necessary to keep his roster spot. By acknowledging that he was going for another player’s job, the veteran was motivated to not only maintain his roster spot but assume a higher profile within the team (e.g., scoring line instead of checking line). A second veteran similarly acknowledged the presence of prospects in the organization that could take his roster spot after his rookie year. However, he concentrated on his own performances and avoided worrying over the number of roster spots available and prospects vying for them. He said:

Other guys, you know them all because you played with them in the minors, they would be writing down the depth chart. But I didn’t really get into all of that. I just wanted to play to the best of my ability. It’s weird but you want to enjoy it a little bit because you never knew if it was going to be your last one. (V1)

By concentrating on his own performance, the veteran avoided obsessing over the team structure and where he fit. Regardless of whether he had a positive or negative performance, he enjoyed his experience and refrained from assessing his past performances at great lengths to the detriment of future performances.

4.2.1.1.2 NHL doubt

NHL doubt means that players were in the NHL yet expressed doubt over whether they would retain their roster spot while experiencing ongoing pressure from other prospects within the team. After a call-up, players live in hotels for the first 26 games of their NHL careers, which
allows them to be instantaneously sent back down to the minors without any prolonged logistical commitments, such as first and last month’s rent or a mortgage. While living in a hotel, it was common for players to express concern over whether a demotion was imminent. One rookie stated:

It is tough. You never know what’s going to happen from day to day. That’s the hardest thing. You are walking on eggshells even though you are happy to be where you are. It’s the best thing that ever happened. It’s definitely a hard situation. I guess you are really nervous about making mistakes and doing certain things because you don’t want that to be a cause to send you down. (R1)

In essence, the uncertainty surrounding their position within the team leads to feelings of stress and doubt over the longevity of their career in the NHL.

4.2.1.2 Opposition

Opposition refers to the opposing players and teams that outmatched the participants. One common quality possessed by the opposition in the NHL is their physical strength and endurance. In junior or college hockey, players competed with less muscle mass and when the participants begun playing in the NHL, they immediately noticed the difference. One retired player explained: “[In the NHL,] I wasn’t playing against junior players anymore. I was playing against men. Even though I was a bigger guy, they had men muscle” (Re10). As junior, college, or minor league players, many of the participants were also renowned for their ability to score. However, due to the quality of the opposition, scoring in the NHL became complicated with open space closed down quickly and scoring chances less common. One veteran goal-scorer elaborated: “At the NHL level, everyone is very skilled and you don’t have much time out there. The open space closes really quickly. A lot of times, you aren’t scoring on your first shot, it’s the
second or third” (V2). From this description, scoring in the NHL is prevented by defensemen that are multi-talented (e.g., balanced, strong, agile), consistently aggressive, and superior tactically. The outcome is only achieved after a period of resilience, in which possession is gained in the offensive zone, scoring opportunities are sought, and quality shots are taken. Should players experience a prolonged scoring slump or feel unable to handle the physical strength of opposing NHL players, questions could arise about their capacity to stay in the NHL.

4.2.1.2.1 Knowledge of opponent

Knowledge of opponent refers to understanding the tactical, technical, mental, and physical strengths and weaknesses of opposing players and their teams. The study of one’s opposition is frequent in the NHL and can serve to differentiate between those that stay in the NHL and those that are demoted. One retired player explained:

It’s understanding the game and how it’s played. You have to understand your opponents. It’s not work hard and you will make the NHL. First of all, you have to have some talent to get you there. But more important is to know who you play against. For me, I knew all of the fighters. Who were the left-handed fighters? Who were the right-handed fighters? Do they want to fight really close? I would prepare in that area. Those are the details I would pay attention to. This is how I had to prepare to play in the NHL. (Re6)

Regardless of experience in the NHL, the participants noted that they engaged in some analysis of their opponent with hopes of maximizing their chances of success. Without such information, NHL players risk being surprised by an opponent, forced into making a quick irrational decision, and have minimal time to execute leading to performance issues. While video analysis ensured that the participants were prepared for their opponents, the opposition had equal access to video. One retired player explained:
Before, I could only watch one game but later in my career I could watch them all. That means that my opponents could watch them too. They knew what I was going to do so I had to ready to counter (R1).

The use of video analysis contributed greatly to the understanding of an opponent’s tendencies but also forced the participants find novel ways to generate scoring chances, win fights, and defend against an offensive attack among other situations.

4.2.1.2.2 Overwhelmed by NHL talent

Overwhelmed by NHL talent refers to the incompetent feeling among young players struggling to perform in an assigned role in the NHL. Many of the participants in the present study have had lengthy careers in the NHL while one rookie had been subjected to numerous call-ups and demotions. When asked to explain his struggles in the NHL, he alluded to the elevated talent-level in the league: “I just think the level of play was a big thing. You are playing against the best players in the world. The best goalies in the world are in that league” (R2). The opposition was indeed difficult to overcome and prevented the said player from scoring at pace resembling his junior and minor league career output. The remaining participants that realized this trend adjusted to become role players in the NHL instead of point producers. However, even in these cases, some players hesitated to make the transition and continued to be unproductive at the NHL level in the beginning. One retired player echoed the aforementioned participant’s quote by stating: “When I got there, the talent level, strength and the speed was overwhelming. I didn’t have a problem with the aggressiveness. I had a problem gaining enough space to produce” (Re3). Quite clearly, the talented opposition in the NHL turned a player’s perceived strengths into average qualities and some players struggled to acknowledge the reality of playing against
the best players in the league, which is that they will prevent them from generating individual points and basic statistics.

4.2.1.3 Competition vignette

There are two sources of competition when a player hopes to maintain their NHL roster spot: within-team and opposition. The competition from teammates is stressful during the first few years when prospects belonging to the team compete for the few openings on the NHL roster or hope to unsettle a newly established player. The competition doubles when the openings or roster spot taken are checking line roles that can also be filled by readily acquired talent throughout the league (e.g., unsigned prospect, free-agent, trade). To overcome the competition from teammates and future teammates, the participants expressed the importance of focusing on their responsibilities and getting their jobs done. If they worried about incoming talent such a prospect or player acquired in a trade, the participants would have doubts about their ability to maintain the NHL roster spot. Doubt would manifest itself in games and the player would underperform leading to an eventual demotion to the minors. In terms of the opposition, they challenge teams and individual players in games, especially when a rookie or sophomore plays against an established veteran or all-star on the opposing team. One way to handle the challenge to know the opponent’s strengths in order to avoid them but there is no opportunity to learn about the opponent, some participants were explicit in saying that they quickly felt overwhelmed. Feeling overwhelmed meant that the participant had a short stint in the NHL and returned to the minors. On the other hand, the participants that collected information about their opposition seemed to gain confidence quickly and maintained their roster spot.
4.2.2 Basic statistics

The stress associated with basic statistics along with an individual and interpersonal strategy that leads to an outcome

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teammate – Trust linemate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic statistics</td>
<td></td>
<td>Role expectation</td>
<td>Renew contract</td>
</tr>
</tbody>
</table>

Basic statistics refers to the statistical output that the participants achieved as young players or role players in an effort to remain with their NHL team and avoid being demoted to the minors. Such statistics involved face-offs, plus/minus, time in offensive versus defensive zone, passes, hits, blocked shots, shots, and scoring chances. If a participant failed to garner one of these statistics, their place within the team could be challenged. One rookie shared a basic statistic that his team followed closely with him: “The big thing for me in this organization was face-offs. Then they can trust putting you out there in the defensive zone or during a stoppage in play in the offensive zone” (AD). Coaches and managers typically select the statistics that will dictate whether a young player or role player remains with an NHL team. Young or role players might fret over whether or not they will be able to meet these basic expectations or feel overwhelmed should they fail to contribute with what (i.e., games) they are given. A lack of results can mean that the team no longer requires the player’s services and they are released.
4.2.2.1 Role expectation (Teammate: Trust linemate)

Role expectation refers to the responsibility held by young players or role players in the NHL to generate basic statistics that will aid the team in winning. Among the participants in the present study, few were high profile players that the league featured to mass media. In many cases, participants had to ensure they consistently met the expectations associated with their role on the team. One rookie elaborated on his role:

You play smart by finishing your checks. You are trying to be a smart player. You don’t want to give up odd man rushes. When you get the puck, you don’t try to do too much. You have to understand your role. Sometimes you have to give up the puck and then chase it down. I think everybody wants to make plays but I think, as a fourth line player, you have to understand that it’s not always your play. I don’t think you are given as long of a leash and that’s the simple truth of it. (R1)

Young and role players are forced to understand their expectations clearly and meet them. Otherwise, as the aforementioned rookie alluded to, the coach’s confidence in the player is lowered and the opportunities are less frequent. One way to meet their expectations is through the positive contributions of a trusted teammate. One retiree explained how a veteran linemate helped him:

(Name) was my left-winger. He came from the (team). He was a really good linemate. He was strong on his feet and had a good wrist shot. I remember in the first month, I couldn’t put a pass on his stick. But I remember him fixing the passes like it was on his stick. If it was behind, he would kick it up. If it was ahead, he would reach for it. (Re10)
From the retiree’s quote, a trusted teammate can mask a young player’s inability and allow them the time to get settle into their new role within the team or produce the statistics that allow for a contract to be renewed.

4.2.2.2 Basic statistics vignette

Maintaining one’s roster spot in the NHL also depended on the participant’s production. Teams monitored their players’ output closely in games with hopes of eliminating those that contribute least (e.g., numerous penalties, low plus-minus) and keep those that are contributors (e.g., win faceoffs, block shots, numerous hits). Each player hoping to keep their roster spot seeks basic statistics, which vary according to their role and position on the team with many occupying roles on the checking line. For example, centermen are expected to win faceoffs, wingers are expected to generate turnovers and scoring opportunities on the counter-attack, and defensemen are expected to have a positive plus-minus ratio (i.e., be on the ice for more goals-for than goals-against). Given that the hockey is a team game, these basic statistics cannot be achieved independently and the participants acknowledged having a linemate or two that they could trust. Together, they would work to meet each other’s expectations, which solidified their position on the team and made them eligible to have their contracts renewed with the NHL team.

4.3 Becoming an all-star

Becoming an all-star was the next stage in an NHL career after the participants reached and maintained their status in the NHL. The stage involved winning individual and team awards, gaining endorsement deals, and signing long-term contracts. In the stage, the stress episodes were: (a) point production, and (b) Stanley Cup playoff intensity. The first stress episode of point production included two adaptive strategies (i.e., practice scoring and create scoring chances) and one maladaptive strategy (i.e., obsess over missed chances). As for the stress episode of
Stanley Cup playoff intensity, there were two adaptive strategies (i.e., Stanley Cup determination and teammate – takes on pressure).

### 4.3.1 Point production

Flowchart 7

The stress associated with point production along with individual strategies followed by corresponding outcomes

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point production</td>
<td>➔ Practice scoring</td>
<td>➔ Multi-year contract</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➔ Create scoring chances</td>
<td>➔ All-star status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➔ <em>Obsess over missed chances</em></td>
<td>➔ <em>Role player</em></td>
<td></td>
</tr>
</tbody>
</table>

*Italic* represents a maladaptive pathway and outcome from the sub-stressor.

Point production is the constant attainment of goals and assists during regular season and playoff games. For rookies and sophomore players, they are forced to score from complicated situations at the start of their careers. One rookie elaborated on the complexity:

> You are only getting a few scoring opportunities. I talked to the development guy here and he said “you are only getting one of those prime opportunities every two or three games.” You know it’s when you get a shot where it’s just you and the goalie. Half of the time, it’s not even that, you have to shoot it by one guy. It’s such a quick play. It’s not even a gimme because it’s five on five. (R1)

From the difficulties, young players are stressed about the lack of scoring and wonder if they can be counted on by their teams to lead them to victory. Later, as veterans, players are expected to be largely responsible for the team’s scoring while the younger players on their teams go through
typical adjustments to defense in the NHL. The pressures are exacerbated when a team makes a significant financial investment in a player (i.e., high draft pick, multi-million dollar contract, or long-term contract). Team management and coaches see the potential in a player to become an All-Star and lead them to the Stanley Cup. Consequently, they invest money into a lucrative contract (i.e., millions of dollars for multiple years) to solidify the player’s commitment to the team. One retired player reflected on a career-long stressor, which was to score: “Because I was the first pick overall and wasn’t reaching my potential, management got frustrated. I was putting out thirty goals, which was enough to keep people on the edge to say ‘maybe he is going to come out’” (Re5). Evidently, the pressures of scoring and as seen earlier, the complex reality of trying to score, weighed heavily on the minds of the participants. Regularly producing points in the NHL served as grounds for players to consider themselves as All-Stars. Players could then utilize this status to sign lucrative long-term contracts enable them to maximize the financial benefits of playing in the multi-billion dollar professional sport league.

4.3.1.1 Practice scoring and creating scoring chances

Practice scoring refers to the use of practices to simulate the situations where players would have the most opportunities to score in games. The situations depended largely on the player’s role, which determined the locations around the net where shots were taken and the number of scoring chances they could generate. Based on one retired participant’s role as a scoring centermen, he did the following in practices regularly:

I would take a pail of pucks and shoot from the top of the circle. I would practice hitting the far corner, low. I just practiced shooting that so that I could come down the wing during the game when I was tired and it was automatic. I didn’t have to look at the net because I knew where it was. I was more worried about the defenseman’s location. Was
he going to block my shot or was he giving me room. I would take one look at the goalie to make sure he wasn’t standing there and the other side was wide open. So that was part of practice and warm-ups afterwards. When we held practice or warm-ups, a lot of the things I would do were automatic. I didn’t care where the goalie was in practice; I just shot there in the corner because if he was not there, it was going in. I didn’t care if it was going in. I wanted to know that I was hitting the net and he had to move his glove to stop it. (Re5)

The above quote provides unparalleled insight into the practices of a high scoring NHL player. The player repeatedly recreated a common game situation in practice and dealt with the challenges associated with it (i.e., defenseman, goalie, and fatigue). The quote even alludes to the player’s confidence in relation to shot accuracy when he incessantly shot at the same target knowing that there would be a greater chance of scoring in games. As for creating scoring chances, the strategy refers to the approach used to regularly produce in the NHL. One veteran participant was an equally prolific goal scorer and he gave insight into an approach needed to regularly score in the NHL. He said:

For me, I had to create opportunities. I had to score goals or get assists or setup teammates. That’s what I always looked at. I didn’t have to score goals or get assists. I had to create chances every night and when you do that, all of the other things follow.

That was my belief and every night that was on my mind. (V1)

The veteran provided insight into a process-oriented objective that helped him score on a regular basis in the NHL. By focusing on creating scoring chances, his actions were aligned with the outcome of scoring and less importance was given if he failed to score.
4.3.1.2 Obsess over missed chances

Obsess over missed scoring chances refers to the act of ruminating after a game in which the participant failed to register a point. Rumination was particularly omnipresent after a series of scoreless games. One rookie believed that rumination was one of his flaws:

I expect myself to play well and if I do not play well, I dwell on it for too long. I come home and I think about what I did wrong. That’s something that I try to get a hold of. But it’s tough. There are nights where I don’t sleep at all. I think about the plays I should make or I didn’t make. (R3)

The participant ruminated about missed scoring opportunities and poor decisions away from the game, which affected his personal life (i.e., sleep patterns). Ruining the lack of scoring was a danger when it became an obsession with rookie players especially susceptible to long scoring slumps and a lesser role. As mentioned by a veteran and retiree earlier, ending the slump resulted from thoughtful practices and less attention to scoring.

Point production vignette

Point production was highly relevant to the participants that hoped to establish themselves as all-stars in the National Hockey League. Points determine the winning team in each game and winning multiple games qualifies the team for the Stanley Cup playoffs where winning can help a team capture the prestigious Stanley Cup. However, very few NHL players reach all-star status and within the present study, there were some participants that played in all-star games, won Stanley Cups, or won individual awards. Among the few participants that were all-stars and top point producers in the league, two signalled the importance of practicing goal scoring, which is the recreation of scoring opportunities given in previous games and the shooting of the puck into the spot that would have led to goal instead of a missing scoring chance. The strategy worked
well for two point producing participants who seemed to always have multi-year contracts to sign while another participant believed that as a point producer, it was importantly to simply create scoring opportunities. During each shift, the participant sought to create scoring chances for himself and his linemates without any concern over the outcome (i.e., whether a goal was scored or not). The latter participant’s strategy was interesting given that it served as a counter point to an initial mal-adaptive strategy that he used and a few other participants admitted to doing regularly: obsessing over missed scoring chances. When players missed a scoring chance, they expressed disbelief in themselves and doubt crept into their minds. The result of an obsession with scoring was the difference between players that continued to occupy a checking-line role and those that moved onto the scoring lines or became all-stars within the league.

### 4.3.2 Stanley Cup playoff intensity

Flowchart 8

*The stress associated with Stanley Cup playoff intensity along with individual and interpersonal strategies followed by two outcomes*

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanley Cup</td>
<td></td>
<td>Teammate – Take on pressure</td>
<td>Multi-year contract</td>
</tr>
<tr>
<td>playoff intensity</td>
<td></td>
<td></td>
<td>All-Star status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stanley Cup determination</td>
<td></td>
</tr>
</tbody>
</table>
Playoff intensity refers to the unique competitive nature of the playoffs that stems from losing teams being eliminated and winning teams getting a better chance of winning the Stanley Cup. The increased intensity is obvious according to one rookie: “It sounds bad but not everybody plays the playoff type of game the whole year. But in the playoffs, everybody is finishing their checks and in good position” (R1). The increased intensity can be attributed to the high value placed on winning the Stanley Cup. With a prolonged playoff, players certainly align themselves for better salaries but more importantly, they have the honor of winning the Cup. One retired player explained: “You get paid playoff bonuses. But if you are making $9,000,000 and another guy is making $500,000, you are all making the same. You are not getting a salary in the playoffs. So it’s not about the money” (Re6). Evidently, money is no longer motivating NHL players yet motivation is clearly optimal because players seek to avoid being eliminated from the playoffs and losing the opportunity to win the Stanley Cup. Instead, there are expectations from team members, opposing players have a high compete level, and teams are under increased external pressure to win the Cup. One retired player elaborated on the external pressures felt by playing in a high-profile market: “You are getting all of the press in the papers. So you were the cat’s ass for a while, at the same time, in (city), they hadn’t won anything since 1940” (Re9). With all of these pressures and the increased intensity, it is no wonder why the participants consider the Stanley Cup Playoffs to be stressful.

4.3.2.1 Stanley Cup determination (Teammate: Takes on pressure)

Stanley Cup determination can be described as players having the highest level of motivation to perform well in their role with hopes of winning the Stanley Cup. One veteran believed that there were two great motivations among all Canadian-born NHL players: “Every kid playing hockey
in Canada has two dreams. One, they want to make the NHL and two, they want to win the Stanley Cup.” (Re7) While NHL players commonly hold these two motivations, there are specific motivations that lead to success in the playoffs. One veteran elaborated:

When the Stanley Cup comes, you get fired up because you are on the world stage. You know everybody in (city) is watching and so are friends and family back home. You want to put on a show and win for the guy beside you in the locker room. It’s really where the bond is formed in a hockey team. In the playoffs, a lot of the goals are scored around the net. It seems like all of the playoff goals are scored in the blue paint. Every goal is hard fought. That’s what hockey is all about. You play with your heart on your shoulder. It’s an amazing time of the year. (V2)

Clearly, there are a number of reasons for players to play well in the playoffs. The Stanley Cup determination is what separates players that are serious about winning and willing to sacrifice their well-being (e.g., slash, cross-check, punch) to score a goal. The motivation to win the Stanley Cup can also add pressure to a team when they are expected to win. However, a teammate can take on the pressure by guaranteeing a win. Thus, freeing up his teammates from the scrutiny of team members, media, and fans. One retiree recognized his captain for doing so on a successfully Stanley Cup run:

(Name) would take all of the pressure off of everyone. He said: “we are going to win.” His first quote when he came to (city) was “I am here to win the Stanley Cup.” His quote before game five against (team) to the press was “we are going to win this game.” He led the charge and we beat them. He said put the pressure on me. I have big shoulders. (Re9)

With the responsibility of winning the Stanley Cup giving to one player, his teammates felt liberated from the pressure and played to their abilities.
Stanley Cup playoff intensity vignette

The Stanley Cup playoffs are another way for NHL players to establish themselves as all-stars within the league. All teams hope to qualify for the playoffs at the end of the regular season yet only half make it. The remaining teams participate in an elimination-style tournament that increases their chances of capturing the cup with each series win. While forwards can help their teams win through point production, defensemen and goaltenders establish themselves as all-stars by helping their teams win in the playoffs. Some participants reached this status through the playoffs and spoke about the determination needed to influence games in a positive way. For example, a defenseman might log plenty of ice-time and suddenly get injured. If they succumb to the injury, they cannot help the team yet if possible, they could forge onwards and continue to contribute. Goaltenders could show the determination by playing game that extend beyond the typical 60-minute games and spill into overtime, which only ends after a goal is scored. The playoffs are a context that tests the players and only the most determined survive, which cements their reputation as all-stars. Now, not all players are capable of handling the pressures in the playoffs. The pressure can originate from fans who hope to avoid disappointment or media members who make generous comparisons between current players and the legendary players that played in the team previously. Two participants acknowledged the efforts made by their captains to address the media and be prepared to shoulder the blame if the team unexpectedly loses. The act gave the remaining players on the team a sense of freedom to perform in their roles while doing whatever it took to help their overly accountable leader.
4.4 Across-career stressors

Across-career stressors were comprised of stress episodes that could occur at any given time in a player’s career. While many stress episode could be associated with rookies, sophomores, and veterans, three stress episodes could take place at any time: (a) high profile team, (b) injury, and (c) relocation. Within the across-career episode of high profile team, one adaptive strategy (i.e., control media) emerged. The across-career episode of injury was comprised of two adaptive strategies (i.e., recovery expectation and family member – dependence). Lastly, the across-career stress episode of relocation was comprised of two sub-themes: (a) previous team, and (b) new team. There was a maladaptive strategy (i.e., isolation from and by new team) related to the previous team. As for the sub-theme of new team, there were three adaptive strategies (i.e., shared interest, teammate – outing, and teammate - life advice) and one maladaptive strategy (i.e., insecure with new team).

4.4.1 High profile team

Flowchart 9

The stress associated with playing on a high profile team along with an individual strategy followed by one outcome

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>High profile team</td>
<td></td>
<td>Control media</td>
<td>Favourable image</td>
</tr>
</tbody>
</table>

A high profile team is an NHL organization that is relatively popular among fans and media members (e.g., Toronto Maple Leafs, Montreal Canadiens, New York Rangers). The increased exposure and interest can enhance a player’s motivation since there is added pressure for the team to succeed. One retired player was traded from a losing team in a small city to a winning
team in a major North American city. He immediately noticed: “The media was more prominent because we were a good team, the expectations were higher, and we had our own media station. So they were a big business operation compared to a small media group in (previous city)” (Re9). Given that the media is more prominent on these teams, players must regularly conduct multiple interviews and press conferences. If players were averse to such a following and the scrutiny, one misunderstanding would be difficult to manage. One veteran from a high profile Canadian market explained: “Hockey is so big here. If you don’t want to handle yourself or if you say one wrong thing, the media is all over you” (V3). Further compounding the stress of playing for a high profile team is the immediacy of new reports, which prevent the possibility of damage control. One retired player that coached in the NHL elaborated: “There is such mass media now and the opinions are a split second away from happening. I think that it’s the hardest thing for a player today” (Re10). The stress of playing for a high profile team stems from the fans’ interest in following their players and the media facilitating the process by all means available (e.g., sport websites, social network sites, apps). Ultimately, playing for a high profile team was like “living in a fishbowl” as one retiree stated (Re2). Fans and media members sought to make attributions regarding the team and each player’s successes and failures. In instances of failure, players needed to solve their problems internally while resisting the difficult questions and constant calls from the media.

4.4.1.1 Control media

Control media is about an approach taken by the participants to regulate the contents of media reports about them and their team. High profile teams are followed by a large contingency of fans and media members that want to know about the players and their activities. Some members of the media conduct detailed reports about a player’s misstep, which forces a response from the
latter. One veteran recalled his response to criticism:

There have been a couple of incidents that I had to deal with. I try to be a man. I think everybody deserves to be treated fairly and with respect. If a guy crosses the line, I say “listen, I heard what you said about me or another source, like if my dad heard it.” I will talk to them once and say “clean it up or change this or I don’t agree with that or why would you say that?” If it’s a case where they are trying to sell newspapers, then the next time they want an interview then I am not available.

“Selling newspapers” is often an objective associated with a member of the media that chooses to follow negative stories about a player or team and publish it. Denying an interview is certainly an option, however high profile players are expected to conduct interviews media members as part of promoting the game. One retiree had an approach that he believed limited the number of negative reports published about him and one high profile team. He stated:

The one thing I did well in (city) was that I was very good with the media. Whether I had a good or bad game, I stuck around and took questions. They respected that. Obviously, when you are playing bad, they have to write about it and it wasn’t as bad as they could have written it. There were some people that didn’t get along with the media and they wouldn’t hear the end of it. That’s what the media is going to do when things go bad. You can look at the Tiger Woods example, they bombarded him. If he would have been a good guy in the media, it would have been different. Some guys can handle the media and criticism in the papers. But some people crumble but if you are not tough and don’t believe in yourself, you are going to get chewed up and spit out.

Essentially, the retired participant believed that being upfront with the media influenced their reports about the player. By granting regular interviews and favours for media members, players
were being respectful, which was returned in the news reports that looked upon them more favourably compared to players that were difficult interviews for the media.

**High profile team vignette**

Among the total number of teams in the league, some are followed by a large fanbase. The fanbase can be a result of a history filled with success stories like the Montreal Canadiens, Toronto Maple Leafs, Boston Bruins, New York Rangers, Detroit Red Wings, and Chicago Blackhawks. The fanbase can increase due to recent success such as the Pittsburgh Penguins, San Jose Sharks, and Los Angeles Kings. Or, the fanbase can result from one country’s passion for the sport, which explains the popularity of the Ottawa Senators, Winnipeg Jets, Calgary Flames, Edmonton Oilers, and Vancouver Canucks. Whatever the reason, the aforementioned teams can be considered hockey markets and the participants acknowledged added stress associated with these teams. The size of the fanbases generally correlated with the number of media members following the team and these members follow the teams closely (e.g., attend practices and games, travel to away games on the charter plane) so they may profile the team throughout the season. With the increased scrutiny came the potential for any and all negative stories to reach the masses. The participants had to control the media and chose one of two options: avoiding the media or addressing the media. The former strategy worked well for low profile players but high profile players that isolated themselves from the media were taken to task. They were considered disrespectful to the media and the media responded with disrespectful commentary or articles. On the other hand, the latter strategy of being forthcoming and addressing the media regularly portrayed a respectful relationship with the media and in return, media members seemed to report the player in a more favourable light.
4.4.2 Injury

Flowchart 10

*The stress associated with an injury along with individual and interpersonal strategies followed by potential outcomes*

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>Dependence</td>
<td></td>
<td>Full health</td>
</tr>
<tr>
<td>Injury</td>
<td></td>
<td>Recovery expectation</td>
<td>Basic statistics</td>
</tr>
</tbody>
</table>

An injury is a physical impairment preventing players from playing games in the NHL. The injuries included: broken bone, appendix bursting, pulled groin, herniated lumbar disc, concussion, severed tendon, and torn knee ligament. Following a lengthy recovery process and approval from the team doctor to resume playing, the participants were still left with frustrations from the injury. One rookie spoke about losing his confidence immediately upon returning from an injury: “I definitely felt my confidence go away and struggled to get my game back. I don’t know exactly what it was. It was frustrating to find your game and feel confident again” (R1).

Returning from an injury is not only a function of getting one’s confidence back, but also calming any doubts about resuming their careers as professional athletes. One retired player candidly stated: “You worry about your livelihood” (Re7). Suddenly, players are left wondering if and when they will be able to return to the line-up and become contributing members. Even upon returning, questions about their ability persisted and players became so obsessed with “finding their game” that they struggled to produce. On the other hand, the frustration felt while “finding your game” could be attributed to an injury that needed more time to heal. Another
retiree explained: “I rehabbed my knee the year before and even though I rehabbed pretty fast, Mother Nature still takes time to heal inside” (Re4).

4.4.2.1 Recovery expectation (Family member - Dependence)

Recovery expectation refers to the timeline set and the patience needed to ensure a full recovery from an injury. Though the specific recovery time varies according to the injury, the participants acknowledged that they needed to understand, follow, and remain patient with a recovery timeline. One veteran recovered well from a career-threatening injury and stated:

I went through a bad back injury where I had a herniated disc. It was tough. I was stuck in bed for a few days. I couldn’t even get out of bed. I think I have overcome it but it’s always still there. You have to train your body. You have to do exercises day in and day out just to make sure your body is healthy. Having an injury like that is definitely an eye opener, especially at a young age. I don’t want that to happen again. So I do exercises and I try to keep the back in shape. (V2)

The veteran ensured that he was fully healthy before returning to the game and used the experience to appreciate the importance of preventing future injuries. In some cases, the injury was debilitating and preventing players from doing the bare necessities of life (e.g., clean, eat, sleep). As such, family member were recognized for being a reliable network that they could depend on. One retiree listed his family’s contributions:

My brother drove me home to see the doctors in (city) and to have the surgery. For him to drop everything and help me by icing my leg, it was great. I was in a wheelchair for over two months. My brother took me for walks every day. He would help me take a shower. I had a gash about a foot long on the side of the leg. It hurt to move around so he would help me with that. The support that he gave me is indescribable. I owe him so much.
In essence, an injury physically limits players from playing hockey in practices and games but also completing the everyday tasks in their personal lives. While following a prescribed recovery timeline and being patient are important personal strategies that enable a full recovery, the contribution of family members, especially at the beginning of the recovery process, cannot be underestimated.

4.4.2.2 Injury vignette

Injuries in the NHL occurred frequently and all participants reported succumbing to an injury at various times throughout their careers. Depending on the injury, the participants set expectations that ensured a full recovery and a return to the NHL line-up. However, the initial onset of an injury in practices and games yields much uncertainty. Players are unsure about the extent of harm and how it will affect their careers. Interestingly, the participants added that some injuries extended into their personal lives where they were bedridden or experienced limited mobility. In this context, NHL teams were less involved and family members intervened. Mothers, sisters, and brothers would refrain from working and leave their families to assist the participants with their recovery. The sacrifice was especially evident in the first few days or weeks and gradually, the participants became independent once more.
4.4.3 Relocation

Flowchart 11

The sub-stressors associated with relocation along with individual and interpersonal strategies followed by potential outcomes

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Sub-stressor</th>
<th>Strategy</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relocation</td>
<td>Previous team</td>
<td>Isolation from new team</td>
<td>Lack of belonging and trust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teammate - Outing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New team</td>
<td>Teammate – Life advice</td>
<td>Fit into team</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commonality</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insecure</td>
<td>Lack of belonging and trust</td>
</tr>
</tbody>
</table>

*Italic* represents a maladaptive pathway and outcome from the sub-stressor.

Relocation entails leaving team members behind in order to join unfamiliar ones on a new team. The sub-stressors are: (a) previous team, and (b) new team. The sub-stressor of previous team was followed by the maladaptive strategy of isolation from or by new team. As for the sub-stressor of new team, there were three adaptive strategies (i.e., shared interest, teammate – social outings and life advice) and one maladaptive strategy (i.e., insecure with new team).

4.4.3.1 Previous team

Previous team refers to the difficulties associated with leaving behind former team members. After being drafted or initially signed by an NHL team, the participants received advice, encouragement, and opportunities from previous teammates, coaches, and managers. These efforts were never unappreciated and when a transaction to a new team took place, several participants acknowledged the difficulty in leaving the team that developed them behind. One
retired player captured the sentiments:

The emotional part of a trade is very difficult. I don’t think there is a hockey player alive that ever believes he is going to be traded. If you are drafted by a club, you eat, sleep and drink whatever they give you. Trades are a very shocking and emotional time not only for the player but the people around them. It’s really like you are part of a group one day and the next day, you are not part of that group anymore. It is a shock to your system. (Re12)

One veteran added that leaving a team behind is also difficult during free-agency:

I did it last year and it wasn’t a whole lot of fun. You have built relationships on the team before you. I am a guy that opens his heart and pours his heart into the organization. You do everything you can to help the team get better and then they let you go and you become a free agent. (V1)

When a transaction occurs (e.g., trade, free-agency), the players involved remain highly attached to members of their previous teams and leaving them behind is distressing even if it is “part of the business.”

4.4.3.1.1 Isolation from or by new team

Isolation from or by new team members refers to the adjustment period that players undergo as they struggle to settle into their new teams and vice-versa. The strategy is maladaptive since it prevents new and established players from building camaraderie in the dressing room and team members that are united. The period is marked with thoughts and memories about the previous team, which prevent them from immersing themselves into the structure of their new team. Some participants acknowledged that they were slow in settling into a new team. One veteran looked back at the transition onto his current team and stated:
You start with a new team and there is that period of time where you have to start caring for these guys. For me, it was hard because I had a lot of fun with the (previous team). It takes half a year. (V1)

Though he eventually settled into a role on the new team and developed friendships with his new team members, these results were achieved slowly. The process was partially slowed by players having belonged to one team for much of their careers, joined an NHL team from an established rival (e.g., Toronto-Montreal, Pittsburgh-Philadelphia), or added to a winning team. Another veteran confirmed the existence of a breaking-in period from both sides:

When I got here, they were such a close knit group that there was going to be a breaking in period for anybody. You are going to have to find your niche on the team and for me; it took a year to figure out. (V3)

The months and sometimes years are spent as a member of a team. However, players feel isolated from teammates when they compare the strength of their relationship with members of their previous team.

**4.4.3.2 New team**

New team refers to the stress associated with joining a new team and building new relationships with members. When joining a new team, participants were unsure of where they fit in and felt isolated from their new teammates. One rookie acknowledged the latter point: “You aren’t out of the loop. You just miss out on little things. When you are the new guy on the team, you miss out on going for coffee or dinner or whatever else” (R1). In terms of the former, one’s relationship status often dictated where they fit in socially. One retired player recalled joining a new team in his second NHL season: “As the single guys on the team, you were almost best friends right away. Others went back with their families and rightfully so while we would go about our day”
Upon arriving, players needed to find their place and depending on the timing of the transaction, further difficulties could arise. Another retired player explained: “Middle of the season is tougher than the start because there are established spots on the team. You know who has this ice-time and their responsibilities” (Re10). Forming new social ties and finding one’s place within the team structure leave players feeling stressed. If they struggle to settle in their new environment, their frustrations may interrupt their performance on the ice and prevent team members from being a resource to alleviate the frustrations.

4.4.3.2.1 Shared interests (Teammate: Social outing and life advice)

Shared interest refers to the common ground held between teammates that are used to form and solidify relationships with teammates. The participants acknowledged searching for players within the team that held the same interests and spending more time with them. One veteran made a statement confirming the aforementioned search: “(Name) and I hit it off because of our junior roots. We have that in common. He is a man of faith and so am I. You look for similarities or things that you have in common with people and you kind of hit it off” (V3). The search ensured that the participants eventually felt a sense of belonging and at ease within the team. However, teammates would often give new players a chance through social outings such as a trip to the movies, eating at a restaurant, or going to a sporting event. One retired player corroborated the notion:

When I went to (team), I was single so I hung out with other single guys. After practice, we would go for lunch. We would then go back and watch a movie. Then we would get invited to so-and-so’s house. As the single guys on the team, you were almost best friends right away. Others went with their families and rightfully so.
While it was common to spend time with their peers, some established players initiated social outings so they could mentor their new teammate. Another retiree praised his team captain for regularly serving him a homemade dinner throughout the season: “Whenever we had a chance, (name) would invite us and after a while, it wasn’t mandatory but it was done regularly and we had no problem with that. He would teach us the facts of life.” The efforts of teammates to welcome new players into the team ensured that the latter knew that the team cared about their well-being. In doing so, the new player would likely reciprocate and solidify his identity as a player on a given team in the same way that a veteran feels ingrained.

4.4.3.2.2 Insecure within new team

Insecure within new team describes the uncomfortable feeling held by new players within a team. They arrive without knowing much about the structure or their new team members but feel pressured to find their place immediately. One veteran recalled feeling insecure in his rookie year and doing much gain his teammates approval:

> When you first try to fit in, you talk too much and you are talking to everybody. You are almost like a puppy dog and you get into everyone’s business. I remember being all over the place. I probably annoyed half the guys on the team. You are so curious about everything and you want to fit it. So you want to talk to everybody. See how everyone is doing. You want to know their personalities. I remember guys telling me to relax you are driving me nuts. It was just locker room stuff. That’s just the person I am. You want to fit in so badly. You do what it takes to get reactions from other guys.

From the quote, the participant made numerous attempts at creating friendships and finally, overwhelmed his teammates who in turn isolated him further. The maladaptive steps of being
insecure and showing it were an ineffective way to build relationships with team members and in some cases, a distractor from being a productive member of the team.

4.4.3.3 Relocation vignette

Relocation occurred frequently in the NHL. Teams travelled to host cities throughout North America to play a single game and then return to their home arena. However, the notion of relocation being stressful only arose when the participants spoke about leaving one team to join another. Many participants held a positive view of their new teams believing that the new team sought them and the previous team rejected them. However, two participants were fond of the previous team especially after spending the majority of their careers with the team. They struggled to integrate within the new team and chose to isolate themselves, which prevented them from building trust with their new team members. Once again, most of the participants recognized that the new team was excited to have them and there was evidence upon meeting their new teammates. New teammates would invite them to partake in social outings (e.g., wine and cheese with significant other, lunch, dinners) that were outside the team schedule such as practices, team meals, and games. Many of the rookies added that they welcomed the life advice given by their veteran teammates during these social outings or team schedule events. The results of these efforts from new teammates led to a feeling of belonging within the group. The participants also mentioned that they were active in trying to fit in. They would seek out teammates that shared common interests and engaged in discussions or activities around the commonality (e.g., hunting, gaming, movies). On the other hand, some of the participants recalled feeling insecure around their new veteran teammates as rookies. They would behave in ways that were viewed as ridiculous (e.g., joke, self-deprecate, annoy) and made it difficult to be accepted by the existing team members.
4.5. Recurrences

Recurrences refer to the numbers of participants that provided a quotation about each theme within the present dissertation. Three data matrices were constructed to showcase the theme and the participants that went together: (a) stress, (b) adaptation and maladaptation, and (c) support network. The least represented and most represented themes were identified. Statistical information was also collected regarding the range in participant numbers within each matrix and the mean total.

4.5.1 Stressors

Table 1

*Data matrix showing the participants with a citation related to an NHL stressor or sub-stressor*

<table>
<thead>
<tr>
<th>Stage</th>
<th>Stressor</th>
<th>Sub-theme</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td>NHL</td>
<td>Draft</td>
<td>R3, R4, R5, V2, V4, V5, Re1, Re3, R4, Re7, Re11</td>
</tr>
<tr>
<td>into</td>
<td>entry</td>
<td>year</td>
<td></td>
</tr>
<tr>
<td>NHL</td>
<td>draft</td>
<td>pressure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NHL</td>
<td>R3, R4, R5, V2, V3, V4, V5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>combine</td>
<td></td>
</tr>
<tr>
<td>NHL</td>
<td>Develop</td>
<td>R1, R2, R4, R5, V1, V2, V4, V5</td>
<td></td>
</tr>
<tr>
<td>camps</td>
<td>Training</td>
<td>R1, R2, R3, R4, R5, V1, V2, V4, V5, Re1, Re2, Re3, Re4, Re6, Re7, Re8, Re10</td>
<td></td>
</tr>
<tr>
<td>Minor</td>
<td></td>
<td></td>
<td>R1, R2, R3, R4, R5, V1, V2, V4, V5, Re1, Re4, Re6</td>
</tr>
<tr>
<td>league</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHL call-up</td>
<td>R1, R2, R3, R4, R5, V2, V4, V5, Re1, Re6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stay in the NHL competition team</td>
<td>R1, R2, R4, R5, V2, V4, V5, Re1, Re2, Re3, Re4, Re6, Re8, Re9, Re10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHL Opponent</td>
<td>R1, R2, V1, V3, Re1, Re5, Re6, Re10, Re11, Re12, Re13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stay in the NHL competition team</td>
<td>R1, R3, R4, R5, V2, V4, V5, Re1, Re3, Re4, Re6, Re7, Re8, Re9, Re13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All-Star Point product</td>
<td>R3, V3, Re2, Re3, Re5, Re9, Re10, Re11, Re12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanley Cup playoff intensity</td>
<td>R1, V1, Re9, Re12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Across career stress</td>
<td>V3, V5, Re2, Re5, Re9, Re10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury</td>
<td>R1, R2, V2, V5, Re3, Re6, Re7, Re9, Re11, Re13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relocate Previous team</td>
<td>V1, Re5, Re6, Re9, Re10, Re12, Re13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New team</td>
<td>V1, V3, V4, V5, Re1, Re5, Re6, Re7, Re9, Re10, Re12, Re13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Re13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The first data matrix was comprised of the stressors and sub-stressors experienced by the participants (Table 1). The least represented theme was *Stanley Cup playoff intensity* (i.e., 4 participants) and the stressors with the highest representation from the participants was *Training camp* (i.e., 17 participants). The reason Stanley Cup playoff intensity held few quotations was likely down to the fact that not all players played in the NHL playoffs and thus were not exposed to the highly emotional and motivating dynamics that exist within a playoff game. As for Training camp, most participants failed to make their teams after the first training camp. In fact, only two participants made the team after their first training camp. The remaining participants were deselected and given minor league assignments. The feeling of being rejected and collecting a salary that was a fraction of an NHL salary weighed on the participants’ minds in a stressful way causing many of the participants to identify training camp as stressful. Upon examining all of the stress themes, the mean number of stressors and sub-stressors with quotations about the theme was 10 participants. The average was higher than the themes in the remaining data matrices and the reason for the imbalance is likely due to the information surrounding each stressor. For example, participants would describe why they were stressed, what it was like, when did they feel stressed, and who contributed to the stress. From the large data set, the participants seemed to favour a discussion about early career stress (i.e., entering and staying in the NHL) rather than later (e.g., becoming an all-star). Not all players became all-stars but the findings suggest that the ultimate objective for many participants was becoming an NHL player. As such, challenges threatening to prevent them from accomplishing their objective would be deemed stressful and qualify as data within the present study. Among the group of participants, some pursued an additional objective, which was to gain all-star status. To reach the
highest status, novel stressors needed to be overcome and less participants were able to provide first-hand insights.

4.5.2 Adaptation and maladaptation

Table 2

Data matrix of adaptation and maladaptation

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Player strategy</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft pressure</td>
<td>Control draft distraction</td>
<td>V1, Re1, Re5, Re7, Re8</td>
</tr>
<tr>
<td></td>
<td>Draft obsession</td>
<td>R3</td>
</tr>
<tr>
<td>NHL combine</td>
<td>Personal insight</td>
<td>R4, R5, V2, V3</td>
</tr>
<tr>
<td>Development camp</td>
<td>Learn about team</td>
<td>R1, V1, V2</td>
</tr>
<tr>
<td>Training camp</td>
<td>Team structure</td>
<td>R4, V4, Re3, Re10</td>
</tr>
<tr>
<td></td>
<td>Camp expectation</td>
<td>R4, V1, V4, Re3, Re10, Re11</td>
</tr>
<tr>
<td></td>
<td>Compete level</td>
<td>R1, R4, Re3, Re11</td>
</tr>
<tr>
<td></td>
<td>Uncertain about roster spot</td>
<td>R1, V5, Re6, Re7, Re10</td>
</tr>
<tr>
<td>Minor league assignment</td>
<td>Readjust expectations</td>
<td>V1, V2, V4, V5, Re1, Re4, Re6</td>
</tr>
<tr>
<td>NHL call-up</td>
<td>Compete level</td>
<td>R1, V2, V4, Re4, Re6</td>
</tr>
<tr>
<td>Within-team competition</td>
<td>Self-driven focus</td>
<td>V2, V4, Re1, Re9</td>
</tr>
<tr>
<td></td>
<td>Doubt NHL spot</td>
<td>R1, Re4, Re7, Re8</td>
</tr>
<tr>
<td>Opposition</td>
<td>Knowledge of opposition</td>
<td>R1, V2, V5, Re3, Re5, Re13</td>
</tr>
<tr>
<td></td>
<td>Overwhelmed by NHL talent</td>
<td>R2, V3, Re4, Re7</td>
</tr>
</tbody>
</table>
| **Basic statistics** | **Role expectation** | **R1, V4, Re1, Re3, Re6, Re9, Re11,**  
| | | **Re13** |
| **Point** | **Create scoring chances** | **R3, V1, V2, V3, Re2, Re5, Re10,**  
| | | **Re11, Re12** |
| **Stanley Cup** | **Stanley Cup determination** | **V1, V2, Re5, Re9** |
| **High profile** | **Control media** | **V3, V5, Re9, Re10** |
| **Relocate from** | **Attached to previous team** | **V1, Re6, Re10** |
| **Relocate to** | **Commonality** | **V3, Re8, Re10** |
| **Injury** | **Recovery expectation** | **Re4, Re7, Re9, Re11** |
| | **Post-recovery doubt** | **Re7, Re11** |

*Italics* denotes maladaptation strategy

The second data matrix was comprised of the strategies attempted by the participants to manage the stressor or sub-stressor (Table 2). The strategies were grouped into adaptation strategies or maladaptation strategies (italics). Among the adaptation strategies, *Learning about the team during development camp* and *Shared interests among new teammates* held the least number of participant quotes (i.e., 3 participants). Meanwhile, the adaptive theme of *creating scoring chances* was employed by 9 participants hoping to produce points. In terms of maladaptation
strategies, one participant admitted to having an *NHL draft obsession*, another would *obsess over missed scoring chances*, and a third *felt insecure with new teammates*. The most repeated maladaptation strategy among the participants was *uncertainty about a roster spot during training camp*. The latter maladaptive theme corresponded with the popular stressor of Training camp, which was a response to how players felt as they competed for a roster spot. The average number of participants in adaptive and maladaptive strategies was 5 participants and 3 participants respectively. The numbers were lower than those found in the data matrix about stress yet higher than the data matrix about support networks. The reason for the higher number than support networks is due to the participants’ tendency to highlight their attempts at resolving a relevant stressor. Participants recalled with relative ease the details surrounding their individual efforts and struggles in dealing with stress. When considering the entire data set about adaptation and maladaptation, there are a more quotes related the former than the latter. The difference is likely due to the participants were comprised of players that had careers in the NHL rather than those that experienced some games at the top level and many games in minor professional hockey. As such, the participants felt stressed but they were eventually able to solve the problem. Any delay in solving the problem was likely due to the employment of a maladaptative strategy. A second reason for the lower number of quotes pertaining to maladaptation may be the reluctance of the participants to share their struggles and appear weak despite what could be viewed as an illustrious career. The notion is referred to as social desirability and current players are likely to have experienced it during the data collection stage given that their careers were active and any perceived weakness could potentially affect its continuation.
### 4.5.3 Support networks

Table 3

*Support network and adaptation or maladaptation in the NHL*

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Source</th>
<th>Strategy</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training camp</td>
<td>Agent</td>
<td>Team needs</td>
<td>Re3</td>
</tr>
<tr>
<td></td>
<td>Teammate</td>
<td><em>Steroid use</em></td>
<td><em>Re8</em></td>
</tr>
<tr>
<td>Minor league</td>
<td>Minor league</td>
<td>Added training</td>
<td>R1, Re6</td>
</tr>
<tr>
<td>Minor league</td>
<td>coach</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td>Positive advice</td>
<td>R4, V2</td>
</tr>
<tr>
<td>NHL call-up</td>
<td>Teammate</td>
<td>Model tactic</td>
<td>V5</td>
</tr>
<tr>
<td></td>
<td>Coach</td>
<td>Tactical advice</td>
<td>R3, V2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Lack of feedback</em></td>
<td><em>R1, R3, Re4</em></td>
</tr>
<tr>
<td>Team competition</td>
<td>Teammate</td>
<td>Positive</td>
<td>V2</td>
</tr>
<tr>
<td>Opposition</td>
<td>Teammate</td>
<td>Protect from</td>
<td>Re7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>intimidations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Respect opponent</td>
<td>V5, Re4</td>
</tr>
<tr>
<td></td>
<td>Coach</td>
<td>Protect from</td>
<td>Re11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>intimidations</td>
<td></td>
</tr>
<tr>
<td>Basic statistics</td>
<td>Teammate</td>
<td>Trust linemate</td>
<td>V1, V3, V5, Re8, Re10</td>
</tr>
<tr>
<td>Point production</td>
<td>Teammate</td>
<td>Model of consistency</td>
<td>V1, V3</td>
</tr>
<tr>
<td></td>
<td>Coach</td>
<td>Scoring advice</td>
<td>V2, V3</td>
</tr>
</tbody>
</table>
The third data matrix listed the participants that held quotations about a teammate, coach, agent or family member’s contribution to adaptation or maladaptation (Table 3). In terms of support network’s making an adaptive contribution, agents were identified once for helping a player understand his NHL team’s needs (i.e., open roster spots) during training camp. Meanwhile, teammates were acknowledged as the most prolific source of support and chief among their contributions was their efforts to hold social outings to welcome new members onto the team. Coaches were also a prolific source of support especially when players sought to capture a roster spot and needed tactical advice. Lastly, family members were particularly important when players were recovering from a major injury and depended on them in the early stages of recovery. As for maladaptive contributions from an NHL player’s support network, teammates and coaches were identified with the former being signalled for steroid use during training camp and isolating themselves from new teammates while coaches would make decisions regarding a participant’s playing opportunities without feedback (i.e., lack of feedback). Generally, most of
the quotes pertaining to support networks were positive and indicative of a relationship that facilitated adaptation throughout the participants’ career. On the other hand, few quotes could be considered maladaptive strategies employed by support networks given that their responsibility was to contribute to the team’s success and the player’s development. In each instance of maladaptation, teammates and coaches seemed to prioritize their careers ahead of others. During training camp, certain teammates took it upon themselves to engage in steroid use with hopes of making the team at the expense of another. In terms of coaches, some provided little instruction to incoming NHL players from the minor league team leaving the recent call-up feeling isolated and confused regarding his place on the team. Perhaps coaches avoided the called-up players knowing that they were temporary replacements and continued to devote themselves to regular players. When compared to those about stress, adaptation, and maladaptation, the data matrix about support network contains fewer quotations with an average of 2 participants allocated to a support network’s contribution.

4.6 Chapter summary

The result section is a reflection of the unstructured conversational interviews held with 23 current and former NHL players. The section is generally comprised of stress episodes situated within one of three chronological career transitions (i.e., entry into the NHL, staying in the NHL, and becoming an all-star) or non-normative transitions that occurred at any given time in the participant’s career. The stress episodes were comprised of a stressor followed by at least one individual pathway towards an adaptive consequence. Due to the large number of participants, additional adaptive or maladaptive pathways to resolving one’s stressor where also presented. Further to the individual pathways, corresponding contributions from support networks such as coaches, teammates, family, and agents were also unearthed. The contributions were mainly
adaptive efforts but the participants deemed some efforts to be maladaptive. As part of each stress episode, thematic maps were constructed to illustrate the stressors, pathways, and consequences. Finally, with 23 participants leading unstructured interviews, a range of stress episodes emerged. On the other hand, two or more participants experienced the same stress episodes, which were given the label of recurrences in the result section. Data matrixes were constructed to reveal the participant code names that had at least one quotation for each theme and sub-theme.
CHAPTER 5

5 Discussion

5.1 General findings

The three research questions in the present study centered around three themes: (a) the stress episodes encountered by athletes in the NHL, (b) the processes employed to seek the outcome of adaptation during each stress episode, and (c) the contributions made by social support networks to help NHL players navigate through their various stress episodes. The recruitment of 23 NHL players including 5 rookies, 5 veterans, and 13 retired players stands as the largest group of professional athletes individually interviewed for academic research. Previous studies involving individual interviews with NHL players reached a maximum of 11 participants (see Battochio et al., 2010) and only Noblet and Gifford’s (2002) 8 interviewees and 24 focus group participants from the Australian Football League is comparable. As a result, themes and sub-themes were unearthed and situated into one of three career transitions: (a) entry into the NHL, (b) staying in the NHL, and (c) becoming an all-star. The three career transitions were normative transitions given that they were filled with predictable stressors. Additional stress episodes were found to burden players throughout a transition or outside of a transition. The fact that the transitions could occur at any given time in a participant’s career meant that they were unpredictable stressors. Injuries and relocation are examples of unpredictable stress episodes uncovered by sport psychology researchers (Stambulova et al., 2009). Meanwhile, playing on a high profile team is a novel unpredictable stress episode. The forthcoming discussion section is divided to address each main theme pertaining to the three research questions (i.e., stress, adaptation or maladaption, and support network contributions).
5.2 Stressors

Stress in the NHL has been characterized within stress episodes that belong within one of four career transitions (i.e., entry into the NHL, staying in the NHL, becoming an all-star, and across-career stress). Each transition is marked by several stress episodes that prevent the participants from making the transition towards having a lengthy career in the NHL. Forthcoming is a discussion about the stressors within each stress episode in relation to the extent literature.

5.2.1 Entry into the NHL

Entry into the NHL is the first step for professional ice-hockey players seeking and obtaining a roster spot in the NHL. Injuries, poor performances, and retirement ensure that there are roster spots are constantly available in the premier professional hockey league (Botterill, 2004). Even though they have an open roster spot, NHL teams are often times the source of stress for many players seeking a roster spot. Stress can occur when NHL teams acquire a player’s rights through the entry draft, subject them to team camps designed to compare them with established players, and assign those that require additional experience to their minor league affiliate. By doing so, prospective players were unsure about whether they will capture a roster spot during training camp or flounder the minor leagues (Nicholls, Jones, Polman, & Borkoles, 2009). The uncertainty related to entering the NHL matched Noblet and Gifford’s assertion that professional careers rarely follow a linear trajectory and that de-selection from tryouts or within-season demotions (i.e., minor league assignments) are common setbacks that precede entry into the highest levels of professional sport. However, each of the participants made it to the NHL suggesting that their stress was short live (i.e., acute). In relation to the literature about stress in the NHL context, Battochio et al. (2009) already identified the earliest stressors of NHL entry draft and NHL team camps. Yet, the frustrations of playing in the minor leagues and the anxiety
associated with an NHL player’s first game were novel stressors originating from the present study. In terms of career stages, rookies provided much insight into the stressors experienced upon entering the NHL while veterans and retired players recalled stressful episodes (e.g., draft year pressure, training camp, first NHL games) that supported the young participants’ assertions.

5.2.2 Staying in the NHL

Staying in the NHL is the second normative stage and pertains to the stress encountered by NHL players in their first few seasons as rookie and sophomore players. Players in this stage are noticeably stressed by the competition, which includes the struggle for places within the team and from the opposition. NHL teams are largely responsible for creating a competitive context by recruiting, drafting, and signing high quality players. Meanwhile, highly skilled and experienced opponents are a second source of stress for NHL participants, which is evident in the frequent instances where the participants felt overwhelmed during their rookie and sophomore years. Feeling overwhelmed by the opposition derives from the competitive context, which is filled with the best ice-hockey players in the world (Perlini & Halverson, 2006). For the participants, the stress of staying in the NHL was an ongoing challenge throughout the first few years of their career suggested that it was chronic in nature. After managing threats from other teammates and challenging the opposition, players were expected to contribute to team success (i.e., basic production) in games. In relation to the extent literature about stress in the first few years of one’s career, sport researchers noted that professional athletes were only overwhelmed in the first year (Battochio et al., 2009; Stambulova, 1994). Yet, the findings in the present study introduce the notion that players dealing with high quality opponents and a need to produce were stressed throughout much of their careers, especially the rookie and sophomore years. Another novel finding is the notion that prospects and teammates compete for the roster spots throughout
the season. Nicholls and colleagues (2009) mentioned that internal competition existed; particularly during tryouts, yet the ongoing nature of competing for roster spots among prospects was uncharted. Worse yet, this form of team competition prevented NHL participants from meeting basic production objectives and becoming contributing team members. As for the themes of opposition and basic production, Battochio and colleagues (2009) revealed that the opponents necessitated adaptation in the NHL while Noblet and Gifford (2002) confirmed the existence of basic production through the themes of poor form or difficult expectation. In terms of career stages, once again the rookie group provided much insight into the staying in the NHL while the older groups confirmed (i.e., within-team competition and basic production) and elaborated (i.e., opponents) upon the younger group’s insights.

5.2.3 Becoming an all-star

The final stage for NHL players involved normative stressors that, if negotiated, would elevate their status to all-stars. Indeed, not all players reached the stage yet there were moments throughout their careers where they were exposed to the stresses including: point production, and Stanley Cup playoff intensity. Point production was viewed as the entry point into the stage. Players that regularly scored for their teams were leading members that were eligible for individual awards (e.g., most valuable player, most goals, most points) given throughout the league at the conclusion of the regular season. Scoring points, being nominated, and winning individual awards were used to justify signing multi-million dollar long-term contracts with teams. For these participants, point production was a chronic competitive stressor because they expected in addition to teams that gave them a multi-million dollar long-term contract, to produce in each game. While participants gained recognition through point production in the regular season, others sought to be contributing team members in another competitive context:
the Stanley Cup playoffs. With only qualified NHL teams in the playoffs and each team playing
to the best of their ability, the experience can be relatively short-lived (i.e., acute) and intense.
The theme of point production is a novel contribution to the extent literature about stress while
Battochio and colleagues have identified the Stanley Cup playoffs as stressful. Schinke et al.
(2012) confirmed the stressful nature of an elimination tournament (i.e., ShowTime Super Six
Boxing Classic) for professional athletes when they described the associated complexities. In
terms of becoming an All-Star, the veterans and retirees provided most of the insight.

5.2.4 Across-career stressors

Across-career stressors were non-normative stressors that arose regardless of an NHL player’s
stage. Instead, players were subjected to the forthcoming stressors with no forewarning or
assurance that they will evade them before moving into a new stage. The stressors were: (a) high
profile team, (b) injury, and (c) relocation (sub-themes: previous team, and new team). Playing
on a high profile team was non-normative given that players had little control over the team’s
that selected them or made a transaction (e.g., trade, free-agent) for their services. When players
lived in this organizational “fishbowl”, the public and media members study them meticulously
for the duration of their career with the team (e.g., Toronto, Montreal, Vancouver, New York).
Stambulova (1994) first reported the pressures of delivering performances for spectators and
one’s team, which is akin to the stress of playing for a high profile NHL team. This chronic
stressor naturally derived from the organization and its fan base (Battochio et al., 2009). An
injury was a personal stressor that could be categorized as acute or chronic depending on the
severity. Nicholls et al. (2006) identified the non-normative stress of an injury. As for relocation,
the stress of leaving the previous team to join a new team was acute and the origin could be
traced back to the team – confirming the findings in multiple NHL studies (e.g., Battochio et al.,
2009; Schinke et al., 2007). Worth noting, the aforementioned three stress episodes were not situated chronologically in relation to any other challenges in their study. Instead, media demands, injuries, and relocation were viewed as non-normative stressors experienced at any given time in a professional athlete’s career. In terms of career stage, rookies provided some insight regarding injuries and relocating for the first time while veterans and retired players gave much insight about all non-normative stress given their experience.

5.3 Adaptation and maladaptation

Adaptation and maladaptation refers to the individual attempts made to overcome a contextual stress episode. When stressed, participants would engage in a singlehanded process designed to help them enter the NHL, stay in the NHL, or become an all-star. The notion that people engage with their stress single handedly is not novel. Helson (1964) alluded to the process almost half a century ago while much more recently, Berry and Ward (2006) labeled the individual process as psychological adaptation. Sport psychology researchers have found that professional athletes engaged in individual adjustments but cautioned that these attempts could also serve to compound existing stress (i.e., maladaptation) (see Tenenbaum et al., 2003b). Forthcoming is a discussion about the adaptive and maladaptive attempts made by participants in relation to the extent literature.

5.3.1 Entry into the NHL

Entry into the NHL elicited numerous adaptive and maladaptive responses due to each participant’s lack of experience with the new NHL context. Consider the stress and pressure from the NHL entry draft placed on the participants that, in many cases, chose to control the distraction rather than obsess over its importance. The constant scrutiny from NHL teams negatively affected the performances of some participants in the same manner reported by
Tenenbaum and colleagues (2003b) where high tension characterized most important performances. The scrutiny was intensified during the NHL combine yet the participants used the evaluation event as an opportunity to show personal insight, an adaptive and known strategy akin to Tenenbaum et al.’s clarity of thought. As for NHL camps, participants used development camps as an opportunity to learn about their new team structure and context as mentioned in Schinke et al.’s (2006) study. Oddly, development camps were not viewed as an intimidating context given that it served as an introduction to the team. One potential reason for the lack of stress is likely due to the current format where NHL teams view the camp as an opportunity for information sharing between prospective players and coaches. After a successful development camp in the summer, participants were asked to attend the team’s training camp in the fall for a chance to make the team. According to the participants, there were two adaptive strategies for making the team in training camp. First, some participants seemingly forced their way onto the team by setting camp expectations or short-term goals that aligned with the overall objective of making the team. Others searched their team’s structure to find a missing role and competed aggressively in the newfound role even if it differed from their previous experiences in junior or minor professional hockey. The former was a novel strategy while the latter was first reported in Schinke et al.’s (2007) work with media data and confirmed in Battochio et al.’s (2010) work. With a roster spot on the line, participants admitted to using a maladaptive strategy in training camp. Some participants attended the camp feeling uncertain about having a chance to make the team and resigned to the possibility of playing in the minors. In each case, they adopted one of the two adaptive pathways in the subsequent years to gain an NHL spot out of training camp meaning that experience factored into making the team out of training camp. In the meantime, until the participants adjusted their strategy in training camp, they were assigned to the minor
league affiliate team where expectations underwent a readjustment to suit the minor professional league. From these league-appropriate expectations, the participants experienced self-enhancement since they worked hard and were open to learning (Battochio et al., 2010). Another way to play in the NHL is through a call-up from the minors when a roster spot became available. In this case, players knew that they needed to be show a high compete level throughout the game even if they were likely to be demoted in the near future.

5.3.2 Staying in the NHL

Staying in the NHL referred to the participants’ attempts at keeping the NHL roster spot gained. While playing the first few call-up games, the participants in their rookie season needed to deal with competition in the team and against opponents while putting up basic statistics. Given that the participants were playing in the premier professional hockey league in the world, it was no surprise that adaptive and maladaptive strategies emerged. When handling competition for roster spots from teammates (e.g., prospects, players return from injury), the participants used a self-driven focus to ensure that they performed in their assigned role. On the other hand, some participants admitted to doubting whether they belonged in the NHL. As for the opposition, participants sought to learn about their opponents (i.e., knowledge of opponents) so they could avoid their opponents’ strength and play against their weaknesses. Some participants recalled feeling overwhelmed by the talent in the NHL, which compounded with any doubt about playing in the NHL prevented players from staying in the NHL. Anecdotal and academic reports (e.g., Battochio et al., 2010; Schinke et al., 2008) supported the notion that understanding one’s opponents was an adaptive pathway. However, the remaining pathways are relatively novel responses to these stress episodes even though players certainly showed a form of self-driven focus to ignore the pressures of the NHL draft and later in training camp. Outside of competition,
the participants needed to produce basic statistics that could be used to justify their contributions in games. The consensus was that understanding one’s role and the corresponding expectations ensured that players had realistic objectives set so they could help the team win.

5.3.3 Becoming an all-star

Becoming an all-star was the transition into a celebrated NHL player. All-star players received an increased salary, longer terms on their contracts, social benefits, greater pension, multiple endorsement deals, awards, and recognition (Battochio et al., 2009). Some of the participants in the present study reached the status of an all-star by regularly scoring on their team’s behalf (i.e., point production) or performing well in the Stanley Cup playoffs. Scoring in the NHL is highly complicated due to world-class goaltenders and team defensive tactics that have reduced the total number of goals scored to an all-time low number (see National Hockey League, 2012). Two adaptive strategies were practice scoring outside of games and create scoring chances in games. To this point, the present researcher is unaware of sport psychology studies about goal scoring and execution in professional sport. The participants offered one psychologically adaptive strategy for practices and another for games. Equally novel and interesting is how obsessing over missed scoring chances narrows a players’ thoughts, makes them uncomfortable, and affects the timing of their execution. As for the Stanley Cup playoffs, there was a heightened intensity because of its importance to players and teams in the NHL. The participants explained that they had to match the intensity of their teammates and opponents, which parallels themes within previous sport psychology research about the NHL (i.e., Battochio et al., 2010; Hagy, 2003) and Olympic Games (Schinke et al., 2008).
5.3.4 Across-career adaptation and maladaptation

Across-career adaptation and maladaptation were individual responses made to stress episodes that occurred at any given time in a player’s career. Consider the occurrence of a major injury that prevents a player from playing a game in the NHL; it could happen to a rookie, sophomore, or veteran player. When injured and faced with rehabilitation, the participants noted that they set recovery expectations, which were short-term objectives leading to a full recovery from the injury and a return to the NHL. In relation to the extent literature, injuries and rehabilitation in professional sport have not garnered much attention from sport psychology researchers though the study of concussions in one contact professional sport (e.g., American football) has garnered much attention from sport scientists (see Guskiewicz, Marshall, Bailes, McCrea, Cantu, Randolph, et al., 2005; Guskiewicz, Marshall, Bailes, McCrea, Harding, Matthews, et al., 2007).

Insight about the recovery process and any long-term consequences of an injury (e.g., chronic pain as retiree, dementia in late life) are possible circumstances to study individual adaptation in future research. Equally uncharted is the individual adaptation strategies of NHL players on high profile teams. NHL teams in Montreal, Toronto, and New York receive extensive coverage from media members due to their large and loyal fan bases. The coverage goes beyond game-day interviews and into a throng of reporters assigned to follow the team’s daily activities even if it means travelling to other NHL cities. Media members can be seen travelling on chartered flight with players and coaches, which will give the illusion of living in a fish bowl (Battochio et al., 2009). Due to their constant interaction, the media could potentially report mistakes by players or negatively skew the contents of an article profiling one player. Consequently, players controlled the media by being readily available for media demands and respecting the importance of the media (i.e., liaison between team and fans). These preventative measures enhanced Battochio
and colleagues’ (2010) findings about controlling distractions from the media, which is a form of
damage control rather than prevention (e.g., player declines interview requests from offensive
radio host). Finally, relocation from a previous team and onto a new team was a stress episode
that could be managed through individual attempts. Some players spent the majority of their
careers on one team, which made leaving the team and settling into a new team very difficult.
These players were released or traded away only to continue to feel a strong sense of attachment.
This sense of attachment or loyalty prevented players from forging strong relationships with new
team members and contributed to feeling insecure and isolated in the new team context. Schinke
et al. (2006) labelled this maladaptive relocation strategy as resisting the environment only they
were referring to acculturation in addition to relocation. On the other hand, many participants
realised they were joining a team that required their skill set. They wanted to fit in and one way
of doing so is by sharing their interests to find common grounds. In relation to the extent
literature, Fiske (2004) spoke generally about belonging and the importance of fitting into groups
while Schinke et al. (2007, 2008) provided two contextual examples of belonging efforts made
by NHL players and Canadian Olympians.

5.4 Support network contributions

Support network contributions refer to the comments and gestures made by teammates, coaches,
agents, and family members of the participants with hopes of adapting to the stress. As
mentioned earlier, stress episodes prompted the participants to respond individually yet the
possibility remains for their support network to assist them or intervene on their behalf. While
the notion of support networks supporting an individual’s adaptation attempts can be found
rooted in the social psychology literature (see Pittman & Zeigler, 2007; Stevens & Fiske, 1995),
sport psychology researchers have begun to see its importance and manifestation (see Battochio,
Similarly to individual strategies, contributions from support networks led to adaptive and maladaptive outcomes. Forthcoming is a discourse about adaptive and maladaptive contributions from support networks throughout the careers of NHL players.

5.4.1 Entry into the NHL

Entry into the NHL was an important transition for NHL players since they gained exposure in the premier professional hockey league in the world (Perlini & Halverson, 2006). The transition was marked with several stress episodes with each episode eliciting adaptive and sometimes maladaptive responses from the participants. Correspondingly, adaptive and maladaptive attempts were made with the assistance or dependence on a support network member or social mechanism as Campbell and Sonn (2009) put it. For example, participants sought learn about the team during summer development camps as prospective rookies. Coaches and staff facilitated the learning process by being forthcoming with various forms of advice including the team’s short and long-term expectations of the player, the team’s preference in terms of developing the player’s abilities, and contextual information about the NHL. The notion of coaches providing adaptive advice leading up to a major competition has empirical support given Schinke et al’s (2008) examination of first time Canadian Olympians and their dependence on advice from coaches that had previously attended the Games. When the participants left the formative confines of development camp and attended training camp (i.e., team try-out), coaches and teammates were no longer supportive. One plausible reason for their absence is the competitive nature of training camp leaving players feeling alienated by the team and somewhat isolated from their remaining networks (i.e., family and agent). Whenever possible, family members and agents were resourceful and provided advice depending on the participants approach. If a
participant set short-term expectations in camp, family members could offer words of encouragement or advice if they had been in a similar situation (e.g., elder family member played in the NHL). If a participant chose to identify the team’s needs and perform according to these needs, player agents were ideal for determining the behaviours that corresponded with the vacant roster spot. For instance, one retiree’s agent set objectives for an exhibition game (i.e., one fight, 5 hits, and 3 shots) that aligned with the profile of a physical left-winger. In relation to the extent literature, family members that offer words of encouragement have been viewed as adaptive contributors to an NHL player’s success (Battochio et al., 2010). Meanwhile, player agents had only been viewed as useful during the negotiation of an NHL contract until the present study as opposed to a resource in assisting prospective NHL players capture a roster spot. Coaches returned to the forefront as an adaptive contributor when players received an NHL call-up. They would re-present the team’s existing tactical strategies, which were introduced at the development camp so that recently called-up players competed well alongside their teammates. The advice from coach prior to games is unsurprising given the anecdotal evidence from sport psychology consultants (e.g., Botterill, 2004; Halliwell, 2004) yet the findings are the first to contain the contents of these discussions between call-up players and NHL coaches.

5.4.2 Staying in the NHL

Staying in the NHL refered to overcoming stress episodes such as competition and recording basic statistics so that the participants kept their spot on an NHL roster. The stress from competition was entirely managed by individual strategies that could be adaptive or maladaptive. However, the stress of recording basic statistics in the NHL to justify one’s roster spot yield adaptive and maladaptive individual strategies that were facilitated by support networks. Consider the individual strategy of understanding one’s role expectations that depended on
linemates operating coherently within their assigned roles. Should a linemate deviate from his expectations, the participants noted that they could deviate from their own leading to chaos on the ice and scoring opportunities for the opposing team. Instead, to meet one’s role expectations, it was imperative that they learned to trust their linemates to effectively play their roles in games. The notion of trusting teammates is quite common in sport psychology research about adaptation in professional hockey (see Battochio et al., 2010; Hagy, 2004; Schinke et al., 2007). Yet the importance of trust between linemates within the context of a game has received scant attention despite its implications. In essence, linemates that function coherently and synergistically are likely to produce the statistics expected and thus, maintain their roster spot. In addition to trusting linemates, the participants explained that coaches could prevent them from producing on a consistent basis by withholding playing time. In the NHL, coaches are responsible for assembling the players into formations that could create scoring opportunities and prevent the opponents from scoring. If a coach believes a player cannot contribute to either scoring or preventing goals, it is possible to remove the player from the formation or limit their opportunities to play. In doing so, the stress of regularly producing in games was compounded by the limited opportunities to play.

5.4.3 Becoming an all-star

Becoming an all-star was reserved for the participants that were immensely talented, had an incessant work ethic, were open to learning (about the game), and motivated to one of the best players in the league. The participants that became all-stars in the NHL spoke about the adaptation strategies that they employed to gain an elite status. Interestingly, the contributions of support networks were omitted from discussions about managing the stress episodes of becoming an all-star (i.e., point production and Stanley Cup Playoffs). Given that they play a team sport, it
is plausible that linemates contributed to their point production totals. Alfermann and Stambulova (2007) attested to this point when they stated that organizational support is highest at the peak of one’s career. However, only a select few emerge as all-stars in the NHL and the accomplishment can be attributed to their natural abilities. Otherwise, any player could become an all-star through support networks and empirical support is non-existent to date. As for the Stanley Cup playoffs, playing on a team filled with talented players enhanced one’s chances of winning the Stanley Cup. Only one participant acknowledged the importance of teammates in winning the Stanley Cup and interestingly, the participant was a four-time Stanley Cup champion. The participant indicated that talented players alleviated the pressure of winning by becoming responsible for the team’s success (e.g., proclaiming to the media that the team will win the Stanley Cup). Despite the insight, questions still remain over how support networks contribute to NHL players reaching all-star status leaving Alfermann and Stambulova’s assertion as suitable to players entering and staying in the NHL.

5.4.4 Across-career contributions from support networks

Across-career stressors were comprised of stress episodes that could occur at any given time in a player’s career including: (a) high profile team, (b) injury, and (c) relocation. Support networks were prolific in contributing to the adaptation or maladaptation process of players in the latter two episodes. Consider injuries and their potential long-term duration, which could extend beyond a player’s contract. In such cases, players were abandoned by teams and in some cases, agents due to the uncertainty surrounding their ability to return to full health and resume their careers. Contrary to Fletcher and Hanton’s (2003) findings, concern or anxieties about potential future injuries were infrequent yet, when a participant was injured, there were severe anxieties about being capable of resuming one’s career. One way to calm these anxieties was through the
comments and acts of, for instance, a sibling who took time away from work to assist a brother with the daily personal tasks after a major reconstructive knee surgery. Next, support networks intervened to assist the participants with the relocation process. When players leave one team, they join a new team that is interested in their services. Teammates on the new team generally welcome their newly arriving teammate (Campbell & Sonn, 2009). According to the participants, two ways to welcome a new teammate involve extending invites to social outings (e.g., restaurant, wine and cheese party) or providing advice about the new context (e.g., apartment to rent, auto repair, directions to arenas and airports). The notion of teammates intervening significantly to facilitate an adaptive relocation process has been supported by sport psychology researchers (see Battochio, Schinke, McGannon, Tenenbaum, Yukelson, & Crowder, 2013). In fact, the findings in the present study add to those in the aforementioned study given that first hand data was collected rather than media data (i.e., second hand interview data from journalists).

5.5 Chapter summary

The discussion section is a reflection about the findings in the present dissertation in relation to the extent literature. Through the unique methodology (i.e., larger number of participants, unstructured interviews, and a thematic analysis), the results were filled with themes and sub-themes that were novel contributions to the literatures about stress, career transitions, adaptation, maladaptation, and support networks. On the other hand, themes and sub-themes were presented that could be related to already established themes. The work of Stambulova and colleagues about career transitions were highly relevant when discussing the normative and non-normative transitions. Noblet and Gifford’s (2002) study with 8 interviewees and 24 focus-group participants from the Australian Football League contained the most empirical evidence that
supported the stressors from the present dissertation. Schinke and colleagues (2006; 2007; 2012) conducted much work and their findings about adaptation strategies corresponded with those in the present dissertation. Even more relevant were the studies conducted with NHL players by Battochio and colleagues (2009; 2010) in addition to Hagy (2004).
CHAPTER 6

6 CONCLUSIONS

The purposes in the present dissertation were threefold: (a) determine the relevant stressors of NHL players and their chronology, (b) identify the individual strategies employed that were adaptive and maladaptive, and (c) reveal the adaptive and maladaptive contributions of NHL players’ support networks. Meeting the three objectives served to fill several gaps in the literature related to discerning the relevant stress episodes of one group of professional athletes in addition to personal and social attempts at mitigating the stress and achieving adaptation. Despite theoretical gaps being lessened, there are potential research objectives that can be set to expand the literature. Aside from the literature, there were applications for several populations involved in the NHL. Forthcoming is a discussion about the present thesis divided into four sections: (a) theoretical knowledge, (b) future directions, (c) practical applications, and (d) final reflections.

6.1 Theoretical knowledge

Theoretical knowledge refers to the concepts, theories, themes, and sub-themes that were supported or augmented through the first-hand empirical data in the present thesis. Before this study, sport researchers knew that professional athletes endured many challenges as they sought to build a career in their sport. The challenges have been identified and some were associated with a specific sport context such as first and second-hand accounts of the struggles of NHL players. However, the challenges were identified without establishing any relationship with subsequent strategies attempted to limit their struggles. Within the present study, it was posited that each challenge encountered by an NHL player was followed with an attempt to manage the
challenge. In some cases, there were one, two, or even three different strategies used to overcome the challenge and these strategies varied according to the player’s previous experiences in the NHL. Rookies and younger NHL player in general were prone to using strategies that were maladaptive in nature. That is to say, the strategy did not mitigate their stress and in fact it further overwhelmed the NHLer to the point where they were subjected to a negative consequence (e.g., minor league assignment, demotion, one year contract). From the results, strategies attempted by the NHL players could be followed towards their adaptive or maladaptive consequence. Equally intriguing is the notion that support networks could affect an NHL player’s stress levels. Coaches, teammates, family members, and agents could support an NHL player’s attempts at dealing with stress or compound its effects by being a negative influence. Generally speaking, each of these developments is not novel yet, the in-depth empirical data sustaining each theme and the relationships across themes is unheard of. Each stress episode is a construction of the relevant dynamics therein and even more intriguing is the establishment of a chronology between most of the stress episodes with some being experienced at any given time in an NHL player’s career. By establishing a chronology of stress episodes in the NHL, there is clarity for NHL players regarding the most relevant stressors that they are likely to experience depending on their current career objective (i.e., entry into the NHL, maintaining an NHL roster spot, and becoming an all-star). In all, the developments in the present study augment the current literature about stress and adaptation in the NHL by adding adaptive and maladaptive strategies attempted by professional athletes with various levels of experience and their support networks in addition to their wanted or unwanted consequences.
6.2 Future directions

The establishment of directions for future research depends on the limitations of the present thesis, which are twofold: (a) the failure to reach saturation among active NHL players, and (b) the relatively homogenous group of participants. First, the participant group included 5 rookies, 5 veterans, and 13 retired players. A plausible case can be made that there was much empirical evidence obtained from retired NHL players to support the range of stressors and strategies attempted by players and their support networks throughout their careers. However, the group possessed views of a professional league played in the 1980s, 1990s, and 2000s. Much like other professional sports, ice-hockey has been the subject of major developments thanks to sport scientists and internal auditing processes (e.g., steering committees, union objectives). The developments mean that current NHL players and their views are imperative to draw viable and applicable conclusions through sport research. Consequently, future research ought to focus solely on the experiences of current NHL players. One suggested method is a case study format that will enable current NHL players to reveal the depths of their struggles with building a career in the NHL. Secondly, the disproportionate number of participants is actually a homogenous group. The participants in the present thesis were recruited because of the information they could share and its relevance to the research objectives. Another factor involved in their selection was their relationship with the researcher. Essentially, only NHL players with an existing relationship with the research participated in the study. The research has a background in the sport from having played in northern Ontario and relied on previous contacts to recruit NHL players from the region. Consequently, the group is comprised of Canadians from one province and more specifically, the northern part of the province. Upon examining the demographics of the NHL, half of all players are Canadians and among the provinces, Ontario holds the greatest number of
players in the NHL (National Hockey League, 2012). Despite these statistics, the stress episodes of Canadians from other provinces or the United States of America might differ. Even more so, the stress episodes of NHL players from countries outside of North America might vary greatly when cultural background and cross-continental relocation are factored. Future studies ought to use first-hand data to establish the stress episodes of non-Canadian born NHL players, which make-up half of the league’s players. Outside of NHL players, NHL coaches might offer additional insight about the stress episodes of NHL players across a range of nationalities and should be another sport population that receives attention from sport researchers in the near future.

6.3 Practical applications

The findings in the present study can yield applications that go beyond conceptual developments and into lives of several aspiring or current stakeholders including: (a) NHL players, (b) their coaches, and (c) their teammates. Equally important is the potential contribution of mental performance consultants as facilitators of adaptation in the NHL, which will also be profiled.

6.3.1 NHL players

Aspiring and current NHL players stand to benefit from the findings in the present study. Aspiring players may be junior, college, or minor professional athletes that are seeking an opportunity to play in the NHL. From the findings, there is empirical evidence portraying the journey that NHL players took to capture a roster spot. Some notable early stops involve the NHL entry draft and NHL development camps. To assure themselves of being selected high in the draft, players explained the importance of focusing on their junior or college teams’ objectives and aligning their individual goals so that they constantly contribute to the team’s success. NHL players that struggled with the draft were obsessed with their production and made
endless comparisons with others in the same draft. As for the development camp, players must absorb all of the information about their new NHL team so they may plot a pathway to towards an available roster spot, usually in the upcoming NHL seasons. Mental performance consultants can help aspiring NHL players in both cases. Before the draft, they could help junior or college players set team objectives and align them with the player’s own goals. They may also assist players with the potential questions they are likely to face during the NHL combine and explain the reasoning behind certain responses formulated in advance of the combine. At the development camp, mental performance consultants could share their experiences of working with team members so that players got an idea about the NHL team’s dynamics.

Should an opportunity to capture a roster spot present itself, there is a section devoted to the stress episodes encountered by players entering the league. Precisely, aspiring NHL players could rely on the data in the present study to understand the depths of the challenges they are likely to face in training camp. Moreover, mental performance consultants can reveal the two pathways that enable prospects to capture a roster spot and begin their NHL careers immediately: (a) setting short-term expectations for each session, or (b) identify the team’s least established roster spots (i.e., roles available) and encourage prospects to perform according to the role (e.g., physical left winger for third line). By doing so, prospects will ensure that they impress upon the NHL coaching staff regardless of whether or not they are awarded a roster spot. In all likelihood, they will be assigned to the minor league affiliate club, which was the trend in the present study given that only three participants made the NHL after their first training camp. All others ensured that they impressed upon the NHL coaching staff and continued the trend while playing in the minors. Once in the minors, they must look forward to call-up games and play well for their minor league club. A mental performance consultant must be mindful of the potential role the
player will play in the NHL during a call-up. Indeed, a player’s role in the minors (i.e., point producer) will differ from their role in the NHL. In the NHL, called-up players are likely to see limited opportunities as they play on the fourth-line or third defensive pairing. The responsibilities associated with these less glamorous roles must be perfected in the minors or at least form part of their responsibilities before entering the NHL.

A plausible argument can be made that current NHL players can take an interest in these findings. Rookies and young players would be interested in the stress episodes that prevent NHL players from keeping their roster spot or becoming an all-star in the league. Players may be on the fourth line, the 6th defensemen, or the back-up goaltender and hope to keep their spot. The findings in the present study warn them to focus matching up against weak opponents and generating basic statistics that can be used to justify one’s place on the team. Equally interesting is the fact that the participants were forthcoming about the maladaptive strategies or behaviours that kept them feel unsure about their future in the NHL. Mental performance consultants can use the data to warn young NHL players about the risks (i.e., struggle to play often, fear of demotion, and minor league assignment) of doubting themselves over teammates and feeling overwhelmed by the NHL talent. Consultants could also position younger players so that they aspire to be all-stars in the league. Herein, they could describe two adaptive pathways (i.e., practice scoring and create scoring chances) taken by former NHL all-stars to constantly produce points for their NHL teams. As part of reaching such an elite status, current players must seek to create scoring chances in each shift on the ice while rehearsing all missed scoring chances in the next practice.
6.3.2 Coaches

NHL coaches can be a viable resource as NHL players seek adaptive outcomes in a stress episode. According to the NHL participants, the most notable stress episodes for coaches to intervene were development camps and NHL call-up games.

At development camps, coaches were instrumental in sharing the team’s structure so that players knew about the opportunities that existed within the team and the pathway they would take to reach the NHL, which was highly motivating for the players when they returned to junior hockey or the minor leagues. Examples of such discussions about junior hockey included finishing in the top two positions for scoring on the team, regularly killing penalties for the team, winning 50% of their face-offs, and helping the junior team qualify for the playoffs. In meeting these expectations, players were in a position to compete for an NHL roster spot or in all likelihood, solidify a place on the minor league team. In the case of being in the minors, players will have some experience meeting the expectations of being in a lesser-known role (e.g., winning face-offs, killing penalties) from their time in junior. Mental performance consultants can facilitate the journey through junior and minor professional hockey by ensuring that aspiring players utilise effective goal-setting techniques and feel confident knowing that there is nothing further to achieve outside of the NHL.

During NHL call-up games, coaches would provide tactical advice for the newly arrived players so that they worked effectively with their teammates and foiled the opposition. Coaches would hold individual meetings and show video content that illustrated the patterns within their team as a means to erode the unfamiliarity that comes with joining a new team. Mental performance consultants could intervene to ensure that the players called-up to the NHL have come to understand their role and responsibilities on the team, which will enable them to better
use their coaches’ advice. On the other hand, the data includes examples of coaches stymying a player’s growth by withholding playing time during games. Coaches might be unwilling to trust a newly arrived player from the minors, which severely limits the new player’s opportunities to test themselves against NHL competition and leaves them frustrated and unsatisfied with their call-up experience. Mental performance consultants could intervene in such cases to explain the reasoning for the coach’s decision. Oftentimes, coaches are under immense pressure to win or risk being fired, which means that they will likely prefer players that are equally motivated to win games. As such, coaches will place their trust in these players and play them more frequently while shunning attempts at developing young NHL players for the team’s future. Coaches stand to reason that investments in young players are futile if they feel insecure in the long-term viability of their coaching position. In the end, mental performance consultants could teach young players about adaptive responses to being frustrated and monitor these attempts.

6.3.3 Teammates

Teammates can be a viable resource when NHL players are faced with the stress episodes of generating basic statistical output, playing in the Stanley Cup playoffs, and relocating to the NHL or from one NHL team to another.

When players begin their careers in the NHL, they must build a trusting relationship with their linemates and hope that their linemates will not hold them back. Some players are timid when they first join a team and players that show a high compete level seem to be regular contributors for the team. The participants showed a preference for playing with linemates that were assertive and capable of regularly doing their jobs in games. Mental performance consultants could ensure that young players avoid having doubts and feeling timid in games by building their confidence in themselves. They could compare their skills to players that are
already in the NHL but had similar careers in the minor leagues or junior hockey meaning that they should expect similar success.

In the Stanley Cup playoffs, the participants recognized the importance of having a new teammate step-up during each game. The playoffs are incredibly intense, which makes it difficult to perform well and exacerbates the importance of having teammates being determined to play well so that they could contribute at any given moment. With the stakes being so high, it is imperative for mental performance consultants to ensure that the players on their team are the most motivated. They must present short-, medium-, and long-term goals within the playoffs that resonate with the players and manifests itself in a team that is willing to do anything to win the Stanley Cup.

Relocation from the minors or an old team was also stressful for the participants. They seldom knew any of their new teammates or how the team functioned, which required much help from their new teammates. The latter group would organize social outings with their newly arrived team member with hopes making them feel like they belonged and wanted to help the team’s cause. Veteran teammates would also invite their new team members for dinners or wine and cheese nights to get familiar with each other away from the sport. Here, they would give advice about accommodations, people to befriend, and contacts throughout the city. On the other hand, teammates could also compound the stress of joining a new team if they behave differently and isolate new players, especially younger players that know very little about the NHL context. Mental performance consultants could evaluate the social skills of all existing players and recommend those that will likely connect with the personality (e.g., introvert or extrovert) and status (e.g., single, married, married with kids) of a newly arrived player to strike a friendship.
6.4 Final reflections

The purposes in the present dissertation to determine the chronological and nonchronological stressors of NHL players in addition to the individual strategies and contributions from support networks that could be classified as adaptive or maladaptive. The use of an informal conversational interview gave the participants multiple opportunities to control the discussion, which facilitated the sharing of stress episodes relevant to each participant’s career. In previous studies, researchers conducted interviews according to a guide, which elicited responses to the questions rather than in-depth personal discussion (e.g., impact of stress, maladaptive behaviour, personal regret). The recorded interviews were then analysed using Braun and Clarke’s (2006) inductive thematic analysis because the analysis technique is renown for being data-driven rather than theoretically driven. Even though there are a multitude of studies about stress, adaptation, and the NHL, sport psychology researchers have yet to generate in-depth data that was as contextually rich and personally relevant as those found in the present dissertation. Thus, Braun and Clarke’s technique was employed to capture the unique features of the data without the influence of existing theory. Consequently, the results are filled with empirical data about the stress episodes experienced by 23 current and former NHL players in a chronological manner starting with (a) entry into the NHL, (b) staying in the NHL, and (c) becoming an all-star.

Further, several stress episodes revealed were a-temporal meaning they could occur at any given time in a player’s career. Within the discussion section, the findings are considered in relation to existing themes in the stress, adaptation, and professional sport literatures using a qualitative approach. Highlights within the discourse include several literatures that have been enhanced due to the findings in the present dissertation (e.g., media data and structured interviews with NHL players) in addition to those that were subordinated (e.g., source of stressors, Fiske’s pathways)
or even more interestingly, those that subject to substantial empirical growth (e.g., literatures about maladaptation and contributions of support networks).
CHAPTER 7

7 References


Perceptual and Motor Skills, 87, 1075-1080. doi:10.2466/pms.1998.87.3.1075

Experiences of burnout among adolescent female gymnasts: Three case studies. Journal 
of Clinical Sport Psychology, 4(1), 1-18.


paradox. Perceptual and Motor Skills, 80, 416-418.


Wiley & Sons.

Fletcher, D., & Hanton, S. (2003). Sources of organizational stress in elite sports performers. The 
Sport Psychologist, 17(2), 175-195.

Psychology, 55, 745-774. doi: 10.1146/annurev.psych.55.090902.141456

Forbes. (2009). National Hockey League team valuations rank. Available at: 
http://www.forbes.com/lists/2009/31/hockey-values-09_NHL-Team- 
Valuations_Rank.html

and aggression in professional sports. Journal of Personality and Social Psychology, 54, 
74-85. doi:10.1037/0022-3514.54.1.74


doi:10.1080/10413200500313636


doi:10.1080/00223980.1984.9923661


doi:10.1080/104132001753149892

CHAPTER 8

8 APPENDICES
Dear Potential Participant,

I, Randy Battochio, invite you to become a participant in this research project, “Stress episodes and adaptation in the National Hockey League.” The aim of the project is to gain an understanding of monumental challenges in the NHL in addition to the strategies used to adapt to these challenges. There are three specific research questions in this project:

1. What are the monumental sport challenges encountered by athletes in the NHL?
2. In relation to each monumental sport challenge, what processes are being employed to seek the outcome of adaptation?
3. How might the athletes’ social support network help prospective or current NHL players navigate through their various stress episodes?

As a participant, you will be expected to partake in an individual interview about the stress episodes experienced as a rookie and, if applicable, veteran player in the NHL. For the most part, you will guide the content of the discussion. On the other hand, questions have been assembled within an interview guide and will be posed to ensure that relevant stress episodes are given an opportunity to be discussed. Probe questions have also been assembled to gather details, clarification, or elaboration in relation to a response when necessary.

The discussion provided in the interview will never be assigned to you any time in the future. Next, your words during the interview will be anonymous, and all personal identifiers will be
removed from the data before it is ever shared with athletes, coaches, and sport administrators. To do so, each participant will be assigned a number code, all team affiliations will be removed, as will names, locations, etc.

I promise to share the findings with you in the form of a research report (should you wish for one) and also through invited presentations, that will be available to athletes, coaches, and sport science staff at the end of the project. We will also share the findings from this project with the National Coaches Institute and seek to develop more culturally competent coaching professionals in the future.

The study will run from September 2011 to September 2012. Participation is voluntary and you can withdraw from the study at any time without consequence by notifying me, Randy Battochio. Simply ask and your wishes will be respected. Finally, Laurentian University’s Research Ethics Board has approved this research project. I promise to respect the ethics parameters of this project.

It would be greatly appreciated if you would consent to taking part in this important project.

Yours sincerely,

Randy Battochio
8.2 Appendix B

Informed Consent Form

Study Title: Stress episodes and adaptation in the National Hockey League

Researcher:
Randy Battochio, Human Studies, Laurentian University

Supervisor:
Robert J. Schinke, Professor, School of Human Kinetics, Laurentian University

Dear potential participant,

I, Randy Battochio, invite you to become a participant in this research project, “Stress episodes and adaptation in the National Hockey League”. The aim of the project is to gain an understanding of monumental challenges in the NHL in addition to the strategies used to adapt to these challenges. There are three specific research questions in this project:

4. What are the monumental sport challenges encountered by athletes in the NHL?

5. In relation to each monumental sport challenge, what processes are being employed to seek the outcome of adaptation?

6. How might the athletes’ social support network help prospective or current NHL players navigate through their various stress episodes?

As a participant, you will be expected to partake in an individual interview about the stress episodes experienced as a rookie and, if applicable, veteran player in the NHL. For the most part, you will guide the content of the discussion. On the other hand, questions have been assembled within an interview guide and will be posed to ensure that relevant stress episodes are given an
opportunity to be discussed. Probe questions have also been assembled to gather details, clarification, or elaboration in relation to a response when necessary.

The discussion provided in the interview will never be assigned to you any time in the future. Next, your words during the interview will be anonymous, and all personal identifiers will be removed from the data before it is ever shared with athletes, coaches, and sport administrators. To do so, each participant will be assigned a number code, all team affiliations will be removed, as will names, locations, etc.

I promise to share the findings with you in the form of a research report (should you wish for one) and also through invited presentations, that will be available to athletes, coaches, and sport science staff at the end of the project. I will also share the findings from this project with the Coaches of Canada.

The study will run from September 2011 to September 2012. Participation is voluntary and you can withdraw from the study at any time without consequence by notifying me, Randy Battochio. Simply ask and your wishes will be respected. Once the interviews are completed, the data will be kept in a locked file within my research office for no more than five years, and then shredded.

Finally, Laurentian University Research Ethics Board has approved this research project. I also promise to respect the ethics parameters of this project.

As a participant, you understand that:

- Participation is voluntary and that you can withdraw from the study at any time without consequence by notifying the principal researcher.
• You agree to be audio recorded during all interviews. The interview data will be audio recorded for subsequent verbatim transcription. The researcher will transcribe each interview verbatim and will label each interview by using a respondent-based method (ex. MS1, MS2…) in order to adhere to principles of confidentiality and anonymity.

• Your name and location will be kept confidential throughout the project and onward. Any identifiable information will not appear on any documents.

• All information collected will be entered into a secure database accessed only by the principal researcher and one other member of the research team at arm’s length from the CSC. The database, reports generated by the data, consent forms, and other information collected for analysis will be securely stored in a locked cabinet in the researcher’s private office behind a locked door. All electronic files will be password protected. At no time will other parties have access to this information. All archive will be stored securely for a period of five years from project completion. The data will subsequently be destroyed by shredding (i.e. printed material) and through a deletion program (i.e., electronic data).

• There are two copies of this consent form. You will keep one copy and provide the signed copy to the principal researcher.

Project reports detailing the findings of the study will be generated for peer-reviewed journal publications and conference presentations.

If you have any questions or concerns about the study or about being a subject, you may contact me or my supervisor (Dr. Robert Schinke) for information:

Randy Battochio
Human Studies
Laurentian University
935 Ramsey Lake Road
Sudbury, Ontario. P3E-2C6
rx_battochio@laurentian.ca

Robert Schinke, EdD, Canada Research Chair in Multicultural Sport and Physical Activity
School of Human Kinetics
B-241 Ben Avery Building
Laurentian University
935 Ramsey Lake Road
Sudbury, Ontario. P3E-2C6
(705) 675-1151 ext. 1045
rschinke@laurentian.ca

This research project has been approved by Laurentian University Research Ethics Board.
For concerns or questions regarding the ethical conduct of the study, you may also contact the Laurentian University Research Officer Dr. Jean Dragon at (705) 675-1151, ext. 3213 or email at jdragon@laurentian.ca.

I agree to participate in this study, and I have received a copy of this consent form.

Signature (Participant): ______________________  Date: ___________
Copies of the research project results will be made available to all participants.

I would like to receive a copy of the final report of the study:

☐ Yes  ☐ No

If yes, please provide your contact information:

Email address: __________________________________________________________

Mailing address: _______________________________________________________
8.3 Appendix C

Ethics Form

APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS
Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

<table>
<thead>
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<th>TYPE OF APPROVAL</th>
<th>New</th>
<th>Modifications to project</th>
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<td>Randy @ ttochio (Dr. Robert @ chinke, supervisor) @ Human &amp; Kinetics (Laurentian University) &amp;</td>
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<td>Date of approval of project modifications or extension (if applicable)</td>
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<td>Conditions placed on project</td>
<td>Final or interim report on October 13th, 2012</td>
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During the course of your research, no deviations or changes to the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please complete the appropriate REB form.

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate REB FORM.

In all cases, please ensure that your research complies with the Tri-Council Policy Statement (TCPS). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations, and best of luck in conducting your research.

Jean Dragon Ph.D. (Ethics officer LU) for Susan James Ph.D.
Acting Chair of the Laurentian University Research Ethics Board
Laurentian University
8.4 Appendix D

Interview Question and Probe Examples

Questions:

- What kind of player were you in junior and then in the professional ranks?
- What did it take to make the bottom six forward group?
- What did you do to be such a productive player in the NHL?
- What were your coaches like in the NHL?
- Who comes to mind when you think about those that helped you settle into the NHL?

Probes:

- Detailed-oriented: “Who else was involved in overcoming that challenge?”
- Elaboration: “Could you say more about that?”
- Clarification: “You said that year was tough, what do you mean by that?”
- Contrast: “How did that head coach compare to your current head coach?”
8.5 Appendix E

**Reflexive Journal**

**Summary**

A reflexive journal is a series of notes taken by myself, the lead researcher, with hopes of facilitating memory recall and monitoring one’s thoughts for a determined period of time. In this case, a journal was kept throughout the data collection and analysis phases. In the beginning, I wrote about my assumptions regarding the potential topics for discussion during the individual interviews with NHL players. For example, I expected the group to withhold information about stress that was handled ineffectively meaning that they were going to avoid talking about embarrassing or frustrating moments. To my surprise, the participants were forthcoming in identifying stressful moments throughout their careers, especially in the rookie and sophomore years. Retired NHL players provided most of the insight, which could be attributed to the fact that they are inactive and revealing their struggles now would have no effect on their playing career. In one case, a retired player regretted his arguments with his coach who preferred two new players that arrived on the team in exchange for the team’s most popular player. The general manager that insisted on playing the new players to showcase them to the team’s fans tied the coach’s hands in a figurative sense and the retired player should have accepted his new role temporarily. Among the active players, only two veterans spoke about their struggles with stressors in their rookie seasons such as one player struggling to fit into the new team. Aside from the unexpected stressful moments and their frustrations, I learned about predictable stressors that were handled unconventionally. For example, injuries are well documented yet the important role played by an NHL player’s immediate family members (i.e., wife, sibling) has been overlooked in favour of assertions that place team members at the fore of a player’s
recovery process. As several interviews were completed, I realised that some players were privy to playing alongside the most celebrated players and coaches in the world. One participant explained what his relationship was like with Wayne Gretzky and admired the Great One’s professionalism. Another participant explained the coaching strategies of Scotty Bowman and how his words would be spoken to get a reaction from himself and the players. Due to confidentiality rules, the participants remain anonymous but their thoughts are reflected in the results of the present study. As the data was analysed, new research topics began to emerge. For example, the participants spoke about their relationships with teammates, which was stronger with those born in Canada. However, the NHL is comprised of players from the U.S.A, Russian, Sweden, Finland among others. The dynamics of their relationships with non-Canadian players could be rooted in the present data and a future study about the aforementioned research topic could prove to be highly insightful. A second potential research topic is a case study about players that experienced highly unusual circumstances in their careers such as a labour dispute between themselves, the player’s union, and the NHL executives. Unusual circumstances could also include struggling to accept a low-profile role on an NHL team, maintaining one’s status as an All-Star, or living with rumours about potential transactions. I have concluded that there is an abundance of novel research topics to explore related to professional hockey players in the NHL.